

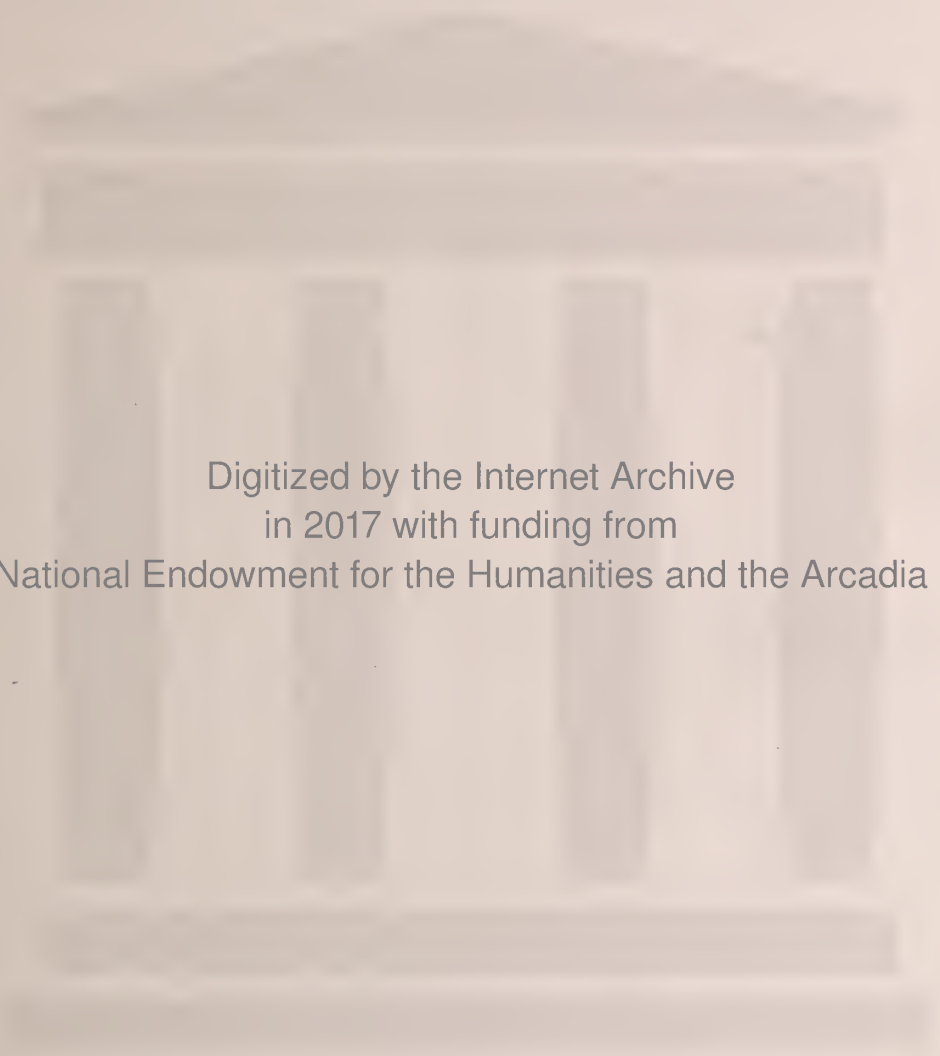
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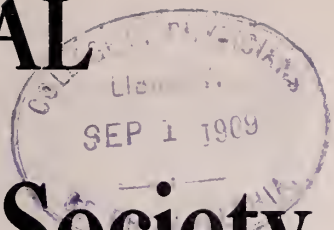
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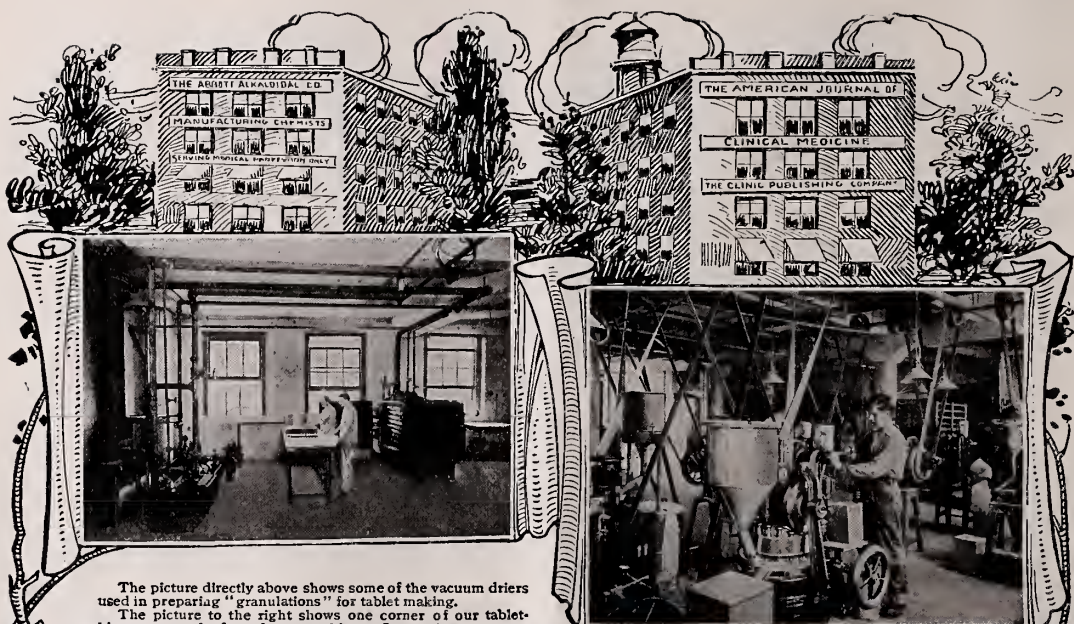
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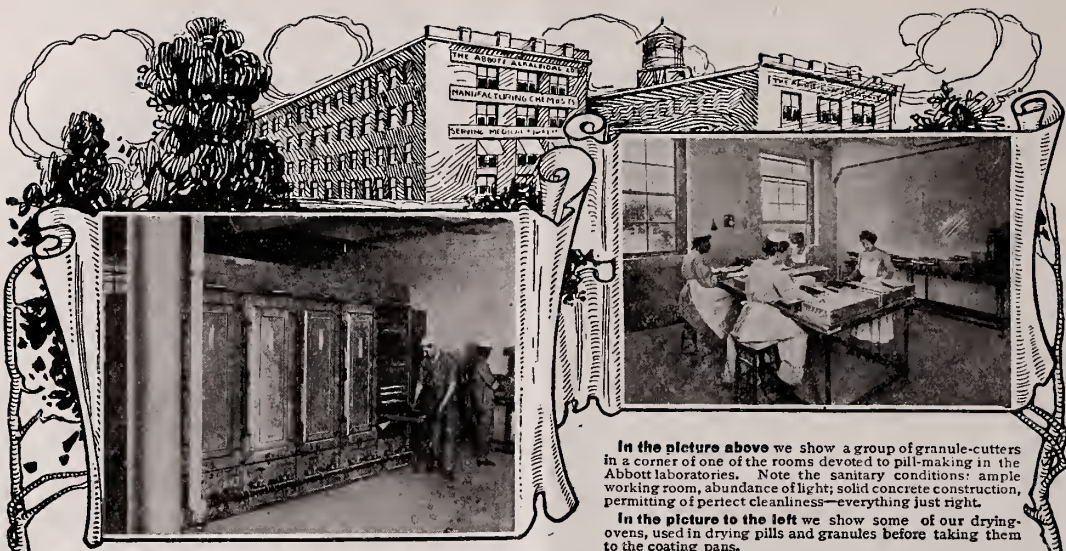


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NO. 1

PRESIDENT'S ADDRESS.

THE DUTY OF IMPARTING INFORMATION TO THE PUBLIC CONCERNING PREVENTABLE DISEASES.

By Joseph T. Clegg, M. D., Siloam Springs.

Fellows of the Arkansas State Medical Society, Ladies and Gentlemen:

Our constitution makes it incumbent on your president to deliver an annual address presumably upon some subject, or subjects, of interest to the profession of medicine. There are so many topics of vital importance, worthy of consideration by this society, that I am uncertain which to choose. One might easily depict the achievements of medical science in the past or descant upon its wonderful work of the present.

But what has been done in the past need not concern us, only as it may bear upon the possibilities of what may be done in the future. No great epoch-making discovery has been made during the present year.

Facts or truths in science are like rare gems, deep hidden and only uncovered at long intervals; and like them, still when found, are of great value. I desire to congratulate the society on account of the harmony prevailing among the members and the general prosperity of the profession throughout the State, though I am sad to say death has robbed us of some of our brightest members. A prosperity not due to any calamity of the people calculated to increase the work of the physician; but to increased wealth and happiness enjoyed by the citizens of the State on account of improved sanitation and the increase of information among the laity on matters pertaining to the prevention of diseases.

I also desire to congratulate the society on its securing favorable legislation on impor-

tant measures recommended by it. The General Assembly that has recently adjourned enacted many wise and commendable laws for the benefit of the people of the State, but none more so than the one providing for the establishment of a State sanatorium for the care and treatment of those having tuberculosis. It also amended the law regulating the practice of medicine in a manner that makes it very satisfactory.

The text of the law as amended, I presume, is known to all of you.

It is not always an altruistic sentiment that impels the doctor to work for public health, for he knows that a sick man earns no money, and a man without money pays no bills. Besides, it is very much more comforting to him to feel that his service is a luxury to the rich, instead of being a necessity to the poor.

While something has been done already to improve the health of the public, what remains to be done before the ideal is accomplished is truly and yet a task for another Hercules. In matters of public sanitation it is for us to suggest, but for the people to put our suggestions into execution. In an autocratic government when a law is deemed of benefit to his subjects, an appeal is made to the king. In a democratic government, like ours, whenever a measure is required for the benefit of its citizens, the people themselves must grant it. One great work of this society is to impart to the public any knowledge or information that comes to it calculated to prevent suffering, to prolong life, to increase wealth or promote happiness. The State should be awakened to the vast amount of cost, poverty, crime and human misery it continually endures on account of preventable disease. It is inconceivable that a commonwealth would remain dormant when thousands of its citizens are destroyed annually by tuberculosis and typhoid fever,

If the general public were informed, I cannot believe for a moment that it would permit a plague so easily prevented as malaria to run riot in the most fertile localities of the State—the pumpkin-skinned, frog-shaped men, the sallow-faced, hollow-eyed women, the sickly babes whose fitful, feverish sleep is broken by the deadly sting of the dismal mosquito. All victims of preventable malaria should be replaced by strong men, healthy women, laughing children, and babes crooned to sleep by cradle songs by happy and healthy mothers.

If the people were informed, they would not permit children of the unfortunate poor to die of that most accursed of all maladies, diphtheria, yet curable, when, by spending a little money, free antitoxin could be made accessible to the most remote practitioner in the State. If the people were informed, enterocolitis, dysentery and typhoid fever would be relegated to the realm of curiosities. I would suggest that the society devise some acceptable means to fulfill this one of its purposes, as expressed in our constitution, "To enlighten and direct public opinion in regard to the great problems of State medicine in the prevention and cure of diseases, and in prolonging and adding comfort to life." In our present stage of civilization much of this kind of work will not bring immediate results; but it would not be lost. If properly done it would be bread upon the waters.

While on this subject I am glad to express our thanks for, and our appreciation of, the valuable coöperation of the Federated Women's Clubs in matters pertaining to public health, especially in endeavoring to obtain appropriations by the legislature to aid in the relief and control of tuberculosis.

This and other civic clubs and societies are fast becoming important auxiliaries for public good and the welfare of mankind.

A wise king who is autocrat of his country would provide schools for the education of his subjects, and schools for the technical education of those who would enter the learned professions. Such wisdom, however, our commonwealth has not seen proper to exercise. Our medical schools are entirely without aid and assistance from the State. This is not as it should be, and is very regrettable. I know the men at the head of our medical institutions to be very conscientious, hard-working gentlemen, and that any shortcomings of the school are not due to them. Yet, it would be desirable if our two schools were

merged into one, to which the State could well afford to vote a sufficient appropriation of money to build and equip a laboratory for scientific research and teaching, to furnish hospital facilities and otherwise aid her students to obtain any advantage of medical education that may be obtained in any other State.

The standard of medical education cannot be raised too high. The literary attainments and mental capacity of those desiring to enter the profession should receive special consideration. I think, however, the standard of literary acquirements should not be too inflexible. Mental capacity for observation and thought should weigh more in the medical student than a knowledge of the learning of the ancients. Linacre, with his profound learning, did not do as much to advance the science of medicine and surgery as did John Hunter with his hard work, but lack of schooling. But the capacity for work plus the finished scholar makes the ideal medical student. While on the subject of medical education I deem it not out of place to call attention to the low standard of many so-called medical journals that are published and sent out to be read by busy doctors. They are sent out, not for the purpose of conveying information concerning new truths, or facts pertaining to the science or the advancement of the art of medicine, but to exploit some, perhaps, worthless proprietary or quack remedy. Such journals are truly 'coyotes dressed in the fleece of lambs. They should be stripped of their fleecy covering and herded in their own gangs, that of the patent medicine almanac and cancer cure circulars.

It is utterly inconsistent with any process of reasoning that medical men should be required to obtain a knowledge of physics, chemistry, biology, histology, anatomy, physiology, pathology, the natural history of diseases, hygiene, materia medica, therapeutics, surgery and obstetrics, before being allowed to administer to the sick or aid the injured, when others, by attending a few weeks at some so-called school that describes its methods of practice by a meaningless adjective, or who learn to repeat a few cabalistic prayers at so much per prayer, are permitted to practice without let or hindrance. We do not object to the use of any material, or the application of any method that may be beneficial in the treatment of any disease, but we do contend that no one should be permitted to prescribe for those who are ill, or care for

those who are injured, without having in some degree become familiar with the basic truths upon which the art of medicine is founded; and that simply the adding of an adjective to the word doctor should in no way license one to practice medicine. Every educated doctor knows the value and the limit of value of massage better than the osteopath. Every doctor knows the value of mental suggestion and its limit better than the Eddyite. Every doctor in the South has seen the negro voodoo work miraculous cures equal to the most accomplished so-called scientist; yet, it is popular to think that if one is any description of a doctor, that if he is a faith doctor, a divine healer, a voodoo doctor or some kind of a pathic doctor, such a one should have all the rights and privileges of the profession. The injunction of the learned Sirach, "To honor the physician with the honor that is due him," is apparently too often forgotten. The principles underlying the so-called Emanuel movement and other methods of psychotherapy have been known and practiced for centuries. In olden times every disease had its god, and every passion its temple. "And," says Robert Burton, "you shall find infinite examples of cures done in this kind by holy water, religious crosses, exorcisms, amulets, images, consecrated beads, etc."

The State should have a Public Health Bureau or Board of Health, who should be paid for its services, whose duty at all times should be to advise the different departments of the State government, when necessary, on matters pertaining to public hygiene, with power to compel action during epidemics. This board should also be the State Licensing Board, who should pass upon the qualifications of those who are permitted to practice in the State. The economy of an efficient board of this kind to the State would be inestimable.

There should be in every city or large town, where one could be found who is competent and equipped to do such work, a State biologist, whose duty should be to determine a doubtful diagnosis of infectious diseases such as diphtheria, typhoid fever, etc. He should be also a custodian of a reliable antitoxin, procured at the expense of the State, that could be furnished to an indigent patient without cost. Every member of this society knows that the price of antitoxin puts it entirely out of reach of the poor, and that the cost of production is such that it is not likely that it will ever be otherwise.

There is another economic question of lesser importance, but from my point of view vitally concerning every member of the profession, not of this State alone, but the United States, and that is the high protective duty on all surgical instruments and hospital supplies, which has allowed a combination to be formed by the makers of these articles that are necessities, with the result that we have to pay exorbitant prices for many of them. This condition should be brought to the attention of the proper authorities by the profession at large, or through the American Medical Association.

OUR JOURNAL.

I would suggest the continuation of the publication of the Journal, and that the council appoint an assistant to assist the secretary in his editorial work. Our Journal should be a monthly messenger from each member of this society to every other member. Through its instrumentality the mutual interests of the local societies, as well as the individual members, are kept alive and responsive to all questions pertaining to the welfare of the profession. It is an open forum in which any member can be heard upon any topic that might benefit himself or his brother practitioner. I would suggest that the secretary of each county society adopt as a duty the practice of furnishing its editor with any and all information that comes to his knowledge concerning all items of medical news occurring in his county. Coöperation of this kind will not only be appreciated by the editor, but will contribute immensely to the success of the Journal and will be of inestimable benefit to the State society. I would also suggest that the bound volumes of the transactions still be issued, but upon advanced subscription of those who desire to have them, at a cost sufficient to defray the extra expense of getting them out.

Few complaints of discord have been made by members of local societies in the State. It is not only unfortunate to the members themselves to fail to live harmoniously with one another, but it is for their patients as well. It is an absolute law when one doctor disagrees with his colleague, it engenders a loss of confidence that tends to impair the usefulness of both. There is enough legitimate work in every community to give employment to every physician in it. Contemplate for a moment the amount of surgical work that could be done that is not done. The numbers of lacerations, of hernias, of

hemorrhoids, that drag through life untreated that could be cured; the numbers of cripples that could be restored; the numbers of deformities that should be corrected.

If we cannot or do not desire to do this work ourselves, we should welcome the man to our midst who does. It is better at all times to coöperate than to compete. Every doctor knows something some other doctor does not, else medical association would not be of the value to us it is. Verily, of one body we are many members. The hand cannot work without the eye, nor the eye without the hand. In helping one another we help ourselves.

I want in this connection to remind you of the importance of county organization. The county organization is the unit upon which its superstructure rests. If the county society languishes, the State society will also languish, and if the county society flourishes, an impulse is given that manifests itself as strength and vigor in the State organization.

The influence of the county society is always for good. Its educational value to its members is appreciated by every one. Its aim, moreover, should be to see that every respectable practitioner in the county should become a member, and that every practitioner who is not respectable should be labeled as such. Every member of a local society should make a special effort to attend every meeting. Nothing develops the influence, confi-

dence and usefulness of the physician in a community as does a well organized, harmonious, earnest working county society.

Now, in conclusion, I want to urge each member to continue to work for the good and welfare of this association, to carry on the work until the fullness of usefulness of the society is obtained. We are told that even where two or three are gathered together, power is given. The Germans say that enthusiasm is born of congregating. "How many times have we seen half-red embers, when laid together, glow into a white heat." So it is with association. The friction of mind against mind stimulates thought and emulation. It develops character, it broadens our views of life. It lifts our conception of the worth and merits of each other to a higher plane. It gives moral and intellectual strength to each member, as well as to the whole body. It increases our capacity for work and adds to our usefulness. It contributes to a fraternal unity, lifts us above the sordidness of self and makes the burdens and cares of our calling lighter and more easily borne.

While our annual convocations afford rest, recreation and pleasure to the care-worn doctor as nothing else does, I hope the time is not far distant when every eligible physician in the State will join and help to spread the cement of harmony that will bind the members of our profession into a fraternal unity forever.

THE JOURNAL

OF THE

Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council on the fifteenth of each month.

Edited by

C. P. MERIWETHER, M. D.

Councilor Eighth District

307-8 Southern Trust Building, Little Rock, Ark., to whom all communications should be addressed.

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Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All members desiring a bound copy of the Journal for 1909-10 will please send in their order in the next thirty days. The society has lost money every year on this bound copy, as the expense of publishing three or four hundred extra copies of the Journal each month, in order to get out this bound edition at the end of the year, has been quite an item.

The cost of same will be one dollar. Send in your order at once.

Editorials.

THE JOURNAL.

In assuming the editorship of the Journal I wish to impress upon you that this is your Journal, and can be just what you help to make it.

The object of its publication is to draw the profession of the State closer and mould it into one large family; by so doing, we not only uplift and elevate our profession, but our fellow-man. This can be carried out only by keeping in close touch and knowing what each county society is doing. In order to make this a State Journal, it will require the

active coöperation of every county secretary. It is the duty of each individual member to see that his secretary has something of interest to report. The secretary should send in his report on or before the fifth of each month. The office of the editor is in rooms 307-8, Southern Trust building, and when in the city, come to see us and give us the news.

PRESIDENT CLEGG'S ADDRESS.

On another page will be found the annual address of our retiring president, Dr. Joseph T. Clegg, which abounds in "words of wisdom fitly spoken." He depicts clearly the accountability and responsibility of every member of our profession as to personal effort and the duty of educating the laity in regard to sanitation and hygiene. He brings out in a forceful manner what has been accomplished and what remains to be done before ideal conditions are attained. He shows how necessary it is that the medical men should be the first to enlighten the public and warn our citizens wherein the danger lies. The State should be brought to a realization of the great commercial and pecuniary loss which disease entails, and the untold amount of human misery and suffering which might be easily prevented by resort to the proper measures of sanitation.

Our profession has too long been lethargic in the matter of the public health, and our effort should be crystalized to promote a public sentiment in favor of effective work in the eradication of preventable disease. Our State will have made a great step forward when the proposed sanatorium for tuberculosis patients is completed and ready for the reception of these unfortunates. Let us continue the good work with unflagging zeal until our whole commonwealth is brought to a realizing sense of the ravages of disease, and the necessity for some comprehensive plan of action whereby we may put an end to preventable maladies by removing the cause. There is a selfish, as well as a humanitarian side of this question, as Dr. Clegg has so clearly pointed out; for invalids earn no money, and, according to the law of economics, every member of the community suffers in proportion. When we are able to show our friends the extent of their commercial loss, we are more likely to command attention than when we present the matter from a purely moral point of view.

Dr. Clegg points out the great need of a State laboratory for scientific research, and the deplorable fact that no part of our public revenue is given to the support of a State Board of Health, or in aid of any medical school. It is high time this state of things was remedied. There is no other avenue of expenditure where the outlay would be productive of more lasting effects, and it is only a question of time until this shall be better understood and appreciated.

We heartily agree with our retiring president as to the necessity for a higher standard of medical education, and his desire to see our two medical colleges consolidated, which, in our opinion, would be the greatest move possible in raising our standard and uniting our forces for the good of the profession and the upbuilding of our State.

We are glad Dr. Clegg appreciates the value of a well-supported State medical journal. We trust that every member will take note of what is said regarding the duty of reporting promptly to the editor the good work and progress in the various counties. It frequently happens that our medical news appears first in journals outside of the State. In this way the old adage in regard to "going away from home to hear the news" is rather unpleasantly brought to mind. We would urge upon the secretary of every component society the great good that may be accomplished by the prompt dissemination of medical news and matters pertaining to our profession everywhere, through the medium of our Journal. We bespeak your hearty support along this line.

In this way we shall be able to foster the spirit of harmony and coöperation so ably set forth by Dr. Clegg in his closing words.

THE PINE BLUFF MEETING.

The Thirty-third annual meeting of the Arkansas Medical Society was held in Pine Bluff, May 18-21, 1909, the number in attendance being small.

The headquarters of the visiting members was the Jefferson Hotel.

The House of Delegates and general meetings were held in the auditorium of the Y. M. C. A. The sectional work was limited in the number of papers, but the character of them was good.

A pleasant feature of the meeting was the presence of our guests, Dr. Warren, of St. Louis, as the personal representative of the

surgeon general, United States Public Health and Marine Hospital Service, and Dr. Reagan, as the fraternal delegate from the Louisiana State Medical Society.

The special tubercular meeting for the public at the First Methodist Church, Thursday evening, was a very enthusiastic one, the church being crowded to overflow with the most representative citizenship in the city. The social features were all that could be desired, and the Committee on Entertainment were at the right place, and always at the right time to anticipate the pleasure of the visitor.

The members were the guests of the Jefferson County Medical Society at a brilliant banquet at the Bluff City Hall Friday night, which was one of the most enjoyable banquets in the history of this organization. All of the delegates to the convention were unable to remain for the banquet, but covers were laid for about one hundred and fifty, which included several prominent laymen.

The banquet was served by the ladies of St. Cecilia's Guild of Trinity Episcopal Church, who long ago established an enviable reputation for preparing and serving banquets. An elaborate menu was served, during which fine music was furnished by Prof. Block's orchestra, which added much to the pleasure of the evening.

The program was an excellent and attractive one, and was quite favorably commented upon by the banqueters. Dr. A. G. Thompson, of Pine Bluff, presided as toastmaster and announced the toasts and introduced the speakers in words witty and appropriate. Dr. J. T. Clegg, of Siloam Springs, the retiring president of the society, responded to the toast, "The Arkansas Medical Society," and was followed by Dr. J. L. Caldwell, who responded to the toast, "Ethics of the Dust." Dr. W. F. Smith told of "The Doctor's Life," and W. F. Coleman, of Pine Bluff, spoke of "The Patient."

The "Absent Members" were remembered by Dr. F. Vinsonhaler, of Little Rock, whose subject was "Wives and Sweethearts," and Dr. J. H. Lenow, of Little Rock, the new president, spoke on "My Policies." Following the regular program, impromptu talks were made by T. M. Hooker, Rabbi Ephraim Frisch, of Pine Bluff, and Senator Arthur Turner, of Jonesboro, and Dr. H. F. Spillers, of Pope County. The remarks made by each speaker were sparkling with wit and wisdom and the banquet was indeed a "feast of reason and flow of soul."



Jas. H. Leary A. M. J. H. D.

PRESIDENT OF THE ARKANSAS MEDICAL SOCIETY, 1909-1910

OUR NEW PRESIDENT.

It is always wise to do the proper thing at the right time. The Arkansas Medical Society has shown its wisdom and forethought in the election of one for president who is so well known and beloved by the profession throughout the State.

James Horace Lenow, A. M., M. D.; was born in Memphis, Tenn., February 18, 1850. He received his preliminary education in the public schools of that city, and after completing the high school course, entered the Kentucky Military Institute, in the year 1866, from which he was graduated with the degree of Master of Arts after the completion of a four years' course.

He at once began the study of medicine in the Bellevue Hospital Medical College, of New York, but later entered the Jefferson Medical College, of Philadelphia, Pa., from which he was graduated in the class of 1872.

Dr. Lenow immediately came to Little Rock and began the practice of medicine, which he has actively followed since, thirty-seven years. During this time he has built up a large and lucrative practice and has made friends by the hundreds—yea, by the thousands.

When the University of Arkansas Medical Department was organized, he was elected professor of genito-urinary diseases, which professorship he still holds. He is also dean of the university and is giving that institution a magnificent business administration. His students hold him in loving esteem, not only for his brilliancy in teaching, but also for his many lovable qualities.

One of his splendid attributes is the intensity and earnestness of purpose which he brings to bear on everything that he under-

takes. This characteristic of the man brought a climax in his medical career, which is quite sufficient to wreath the most beautiful garlands in the diadem of the earth's greatest.

In the year 1877, when Little Rock was threatened with yellow fever, and was well nigh panic stricken, and Memphis was daily flashing to the world the horrors of the scourge that was devastating that city, Dr. Lenow was made health officer for the city of Little Rock; and perhaps the city and, indeed, the entire State, has never fully realized the debt of gratitude that is due his successful efforts in keeping the dreaded disease out of our borders. These were times that tried men's souls, but Dr. Lenow measured up to every emergency and gave quick and wise decisions to every question presented. The results were that not a case of yellow fever was imported within the city. No one could have performed a more brilliant and successful service, and every citizen should feel proud—"even to this day"—of this distinguished effort.

He has also given the city his time and talents in the service as a member of the school board, and later as president of same.

He was elected, and reelected for eight consecutive years as penitentiary physician, and later served as county physician, and then as city physician. For many years he has held the responsible position of medical referee for the Mutual Life Insurance Company, of New York. In all of these positions of honor and trust he has given eminent satisfaction.

With such education, training and experience, Dr. Lenow will give the Arkansas Medical Society a brilliant administration, and will reflect great credit as its president and be an honor to the entire profession of the State.

C. C. S.

Transactions of the Arkansas Medical Society

Pine Bluff, May 18, 19, 20, 21, 1909

House of Delegates.

MORNING SESSION.

Y. M. C. A. Auditorium,
Pine Bluff, Ark., May 18, 1909.

The House of Delegates was called to order at 10:00 o'clock a. m., there being a quorum present, with President Clegg in the chair.

HOUSE OF DELEGATES.

Invocation by Rev. Dr. Ramsey, as follows:

"Almighty God, we come before Thee this morning recognizing Thee as the Creator of the universe, and by Thy power doth direct all things, and in Thy presence there is the fullness of joy. Wherever Thou hast created the earth, Thou art God. Clouds and darkness may be around and about Thee, yet Thou art full of confidence, and Thou art full of tender mercy.

"Thou hast scattered the mountains, and before Thee the purple hills do bow. And Thou hast given grass for the cattle and earth for the servants of men. Thou hast scattered Thy gifts with a rich and prodigal hand throughout the world which Thou hast given to us.

"This morning we adore Thee and worship Thee and glorify Thee as Lord, God of heaven and earth. We thank Thee that Thou hast given us in the earth and in the vegetable world remedies and soothing balms for the alleviation of human pain and the destruction of human disease. We thank Thee that Thou hast given to man that spirit and power of investigation to go down into the hidden secrets of nature and bring out those marvelous things that Thou hast given them to utilize for the great work of humanity in which they are engaged.

"We recognize these, our fellow-citizens, who have come here, our Father, standing in the very front rank of our civilization. They are men whose hearts and souls are filled with the tenderest emotions, and with the highest and strongest views that should characterize men who love their fellow-men. We thank Thee, our Father, for the lives of devotion to the science in which they are engaged; for their patient and steady investigations running throughout all years; for their earnest and profound desire to master disease and to

keep in order the health of the people. We thank Thee, our Father, for that spirit of self-sacrifice which characterizes them. We thank Thee that they go to see the low as well as the high; that they administer gladly to the wants and needs of the pauper as well as of the prince. We give glory to God that even a pauper is a prime minister in the eyes of the men in this profession.

"Our Father, we thank Thee for the marvelous things which Thou hast done; for the vast progress that has been made in the science of medicine and surgery; for the vast good that has been accomplished. And, our Father, we ask of Thee that Thou wilt put it into their minds and hearts, in aiding them with the mental power and physical skill, to still go on until they have accomplished things that are so great and so glorious that they scarcely dream today of such a happy consummation.

"Our Father in heaven, we ask Thee to bless each one of these in his daily practice; give him the physical strength to endure its hardships, and, O Lord, our Father, give him a clear head and an earnest desire, and foster every attempt and every effort to extend his skill and perfect himself in his holy profession. Bless each one of these in their homes. Bless this association, and may benefits come to our community from the gathering of these, Thy servants, and our fellow-citizens and our brethren in the flesh. Be with us today and all the days, and bless each and all of us. All of which we ask through Thy grace, Jesus Christ, our Lord. Amen."

Dr. Barry moved that the reading of the minutes of the House of Delegates be dispensed with. The motion was adopted.

Dr. Hay moved that we adjourn until 2:00 o'clock, inasmuch as there is such a small number of delegates present. The motion was adopted.

AFTERNOON SESSION.

The House of Delegates met pursuant to adjournment, there being a quorum present, with President Clegg in the chair.

The next order of business was the report of the Committee on Arrangements.

Dr. Crutcher, chairman: We are glad

you are here. The Committee on Arrangements has very little to announce today, except what you see on the program. Most of the social functions, you notice, have been arranged for the ladies; very little for the men. We expect you to be entertained by your papers and scientific work and business meetings. I am requested by the Y. M. C. A. authorities to state that this building is yours while you are here, to make it your home absolutely. I am requested also by my local colleagues to state that if there is anything you don't see, ask for it. There will be some further announcements to make tomorrow with reference to the entertaining, but nothing specially to be mentioned today.

SECRETARY'S REPORT.

To the House of Delegates, Arkansas Medical Society:

Gentlemen—This report embraces the transactions of the secretary from May 11, 1908, to May 17, 1909, inclusive, and is as follows:

1. Number of component societies composing the Arkansas Medical Society, 61.
2. Number of component societies that have paid the annual assessment, 56.
3. Number of component societies that have not paid their annual assessment, 5.
4. The following component societies have paid their annual assessment:

County.	No. Members.	Receipts.
Arkansas	14	\$ 28.00
Ashley	14	28.00
Baxter	4	8.00
Benton	28	56.00
Boone	15	30.00
Bradley	8	16.00
Calhoun	5	10.00
Carroll	9	18.00
Chicot	8	16.00
Clay	11	22.00
Clark	11	22.00
Cleveland	13	26.00
Columbia	10	20.00
Conway	14	28.00
Craighead	18	36.00
Crawford* .....	..	.....
Desha	4	8.00
Drew	14	28.00
Faulkner	14	28.00
Franklin	14	28.00
Grant	2	4.00
Green	19	38.00
Hempstead	14	28.00
Hot Spring	7	14.00
Hot Spring-Garland	58	116.00
Howard-Pike	11	22.00
Independence	15	30.00
Jackson	15	30.00
Jefferson	33	66.00
Johnson* .....	..	.....
Lafayette	8	16.00
Lawrence	25	50.00
Lee	16	32.00
Little River	3	6.00
Lincoln	7	14.00
Logan	15	30.00
Lonoke	19	38.00
Marion* .....	..	.....
Miller	18	36.00

Mississippi* .....	..	.....
Monroe	12	24.00
Nevada	9	18.00
Ouachita	18	36.00
Perry	4	8.00
Phillips	18	36.00
Polk	10	20.00
Pope	4	8.00
Prairie* .....	..	.....
Pulaski	53	106.00
Randolph	17	34.00
Saline	10	20.00
Sebastian	52	104.00
Searcy	8	16.00
Sevier	18	36.00
Sharp	6	12.00
St. Francis	10	20.00
Union	23	46.00
Washington	28	56.00
White-Cleburne	18	36.00
Woodruff	11	22.00
Yell	5	10.00
Total	847	\$1,694.00

*Have not paid annual assessment.

5. Number of members of each component society, see table above.

6. Total number of members of the component societies, 847.

7. Total membership of the Arkansas Medical Society, 847.

The following societies have not paid their dues for the fiscal year:

Crawford, Johnson, Prairie, Marion and Mississippi.

Receipts.

The source of funds were from (a) assessments; (b) subscriptions to the Journal; (c) sales of bound volumes of the Journal; (d) advertisements, and (e) loans.

Assessments.

Assessments due 1907-8 that were due or collected after the last annual session of the society are as follows:

Ashley County	\$ 2.00
Baxter County	6.00
Boone County	4.00
Bradley County	2.00
Carroll County	2.00
Clay County	2.00
Drew County	4.00
Franklin County	22.00
Hempstead County	22.00
Independence County	12.00
Jefferson County	8.00
Johnson County	46.00
Lafayette County	22.00
Lawrence County	4.00
Lonoke County	40.00
Marion County	8.00
Mississippi County	54.00
Nevada County	14.00
Polk County	12.00
Prairie County	16.00
Pulaski County	4.00
Randolph County	2.00
Sebastian County	18.00
Sevier County	2.00
Union County	4.00
Washington County	36.00
White-Cleburne	2.00
Yell County	2.00

Total amount collected.....\$368.00
Assessments received from fifty-one counties, 1908-9.....\$1,694.00

Subscriptions.

From subscriptions\$ 9.00

Sales of Bound Volumes of the Journal.

Arkansas County\$ 3.50
 Benton County, 10 volumes..... 8.00
 Boone County, 6 volumes..... 4.80
 Bradley County, 6 volumes..... 4.80
 Clay County, 2 volumes..... 1.60
 Clark County, 6 volumes..... 4.80
 Cleveland County, 1 volume..... .85
 Columbia County, 3 volumes..... 2.40
 Drew County, 3 volumes..... 2.40
 Hot Spring County, 5 volumes..... 4.00
 Saline County, 4 volumes..... 3.20
 Sevier County, 6 volumes..... 4.80
 White-Cleburne, 5 volumes..... 4.00
 Yell County, 3 volumes..... 2.40
 Dr. Thibault, 2 volumes..... 1.60

Total amount collected\$53.15

Advertisements.

Total amount received from advertisements in the Journal, and programs of the Thirty-second and Thirty-third Annual Sessions, \$1,250.91.

Bills Receivable.

Loan, from Mercantile Trust Company, Little Rock, \$395.10.

Total Receipts.

Total amount received as per items from all sources, namely: Assessments, subscriptions, sale of bound Journals, advertisements, and loan from Mercantile Trust Company, \$3,770.16.

Disbursements.

1908.

May 22. Warrant No. 160—Morgan Smith. Note made by C. C. Stephenson, Kellogg Printing Co.\$ 257.50
 May 22. Warrant No. 161—Secretary's salary, ordered by the House of Delegates 600.00
 May 22. Warrant No. 162—Morgan Smith Refund typewriter, ordered by House of Delegates 75.00
 May 22. Warrant No. 163—Refund typewriter desk, ordered by the House of Delegates 12.50
 May 26. Warrant No. 164—Kellogg Printing Co., account of Journal..... 800.00
 May 30. Warrant No. 165—Morgan Smith. Expenses to Chicago, ordered by the House of Delegates..... 50.00
 June 21. Warrant No. 166—Kellogg Printing Co., account of Journal..... 300.00
 July 7. Warrant No. 167—Stenographer's bill, Miss Schartbart, ordered by the House of Delegates. Allowance of \$50.00 for this purpose..... 7.00
 August 10. Warrant No. 168—Parkin-Longley, supplies, stationery, etc., for Thirty-second meeting 2.55
 August 20. Warrant No. 169—W. S. Holt, postage Journal 15.00
 August 31. Warrant No. 170—Kellogg Printing Co., account of Journal..... 150.00
 September 2. Warrant No. 171—Overdraft by Dr. Scales, treasurer, on Mercantile Trust Co. 35.90

September 6. Warrant No. 172—Morgan Smith, secretary, for stamps..... 5.00
 October 17. Warrant No. 173—Miss O'Hair, stenographic work for Journal.... 10.00
 October 27. Warrant No. 174—Kellogg Printing Co., account of Journal..... 125.00
 December 9. Warrant No. 175—Spott & Jefferson, jewelers, account of medal, Arkansas Medical Society to University of Arkansas, Medical Department; prize..... 12.50
 December 13. Warrant No. 176—Stamps for Journal and secretary..... 5.00

1909.

January 18. Warrant No. 177—Postage and stamps for Journal and secretary..... 5.00
 February 2. Warrant No. 178—Spott & Jefferson, account of medal, Arkansas Medical Society to University of Arkansas, Medical Department; prize..... 4.00
 February 4. Warrant No. 179—Noel Loeb, stenographic services for Thirty-second Annual Session..... 65.00
 February 20. Warrant No. 180—W. S. Holt, postage for Journal..... 15.00
 March 5. Warrant No. 181—Spott & Jefferson, account of medal, Arkansas Medical Society to University of Arkansas, Medical Department; prize..... 8.50
 March 8. Warrant No. 182—Mercantile Trust Co., interest on note..... 5.60
 March 31. Warrant No. 183—Stenographic services, account of Committee on Medical Legislation 3.50
 April 1. Warrant No. 184—Printing of letterheads and envelopes 7.50
 April 3. Warrant No. 185—Morgan Smith, for stamps 5.00
 April 9. Warrant No. 186—W. S. Overton, stenographic services rendered Thirty-second Annual Session 40.70
 April 15. Warrant No. 187—Express Company, charges on books secured on advertising 2.10
 April 15. Warrant No. 188—Central Printing Co., account of printing the March Journal 83.15
 May 6. Warrant No. 189—Morgan Smith, stamps and postage 10.00
 May 7. Warrant No. 190—Kellogg Printing Co., account of Journal..... 400.00
 May 7. Warrant No. 191—Central Printing Co., account of printing April Journal 101.42
 May 14. Warrant No. 192—Mercantile Trust Co., telephone message to Pine Bluff on account of protest case; Scales, 25 cents, and returned check; J. G. Watkins, secretary Pulaski County Society, \$2.00 2.25
 May 15. Warrant No. 193—Kellogg Printing Co., account of Journal, balance due; paid in full 648.21
 May 15. Warrant No. 194—Central Printing Co., account of printing May Journal and 1,500 programs for Thirty-third Annual Session 145.35
 May 17. Warrant No. 195—Mercantile Trust Co., payment of note made to pay Kellogg on account of journal..... 400.00
 Total\$4,015.23

Receipts.

Receipts from May 14, 1908, to May 17, 1909, inclusive, as follows:

From advertisements\$1,250.91
 From assessments 368.00
 From sale of bound Journals..... 53.15

From subscriptions.....	9.00
From loan of Mercantile Trust Co.....	395.10
From assessments, 1909.....	1,694.00
Total receipts	\$3,770.16

Disbursements.

Warrants No. 160 to 195, inclusive.....	\$4,415.23
Amount in hands of treasurer May 14, 1908	\$1,744.70
Amount receipts	3,770.16
Total	\$5,514.86
Less disbursements	4,415.23
Balance in hands of treasurer this day.....	\$1,099.63

The Journal.

The Journal has been printed for the last twelve months at an average monthly cost of \$86.90, the items for each month being as follows:

1908.		
June	\$	117.75
July, published by Kellogg Printing Co.		73.50
August		83.05
September		75.50
October		76.40
November		76.40
December	99.98	\$ 602.58
1909.		
January	76.40	
February	76.40	\$ 152.80
March, Central Printing Co.....	83.15	
April	101.42	
May	102.75	\$ 287.32
Total		\$1,042.70
Average, \$86.90.		

When I was appointed editor the Journal was being published under a verbal contract with the Kellogg Printing Company, of Little Rock, and from year to year this contract has been verbally revived by the contracting parties. This contract, until June, 1908, involved the obligation on the part of the society to have 500 copies of the Journal bound at a cost of 60 cents a copy, aside from the obligation to have not less than one thousand copies of the Journal printed monthly.

The only change made in this contract as entered into by the previous editor was the striking out of that part which obligated the society to take 500 bound copies of the Journal. As it has been clearly shown that this was almost a dead loss to the society, and the cause of much of the accumulated indebtedness under which the society had been laboring, I succeeded in renewing the old contract with this item omitted, the abrogation of which item has been the saving of about \$400.00 a year. It may be unwise to enter into such another contract, although at the time this one was made, it was the best arrangement that could be effected.

No doubt the irregularity of the appearance of the Journal has been a matter of much comment and concern to the membership, as it has been vexatious and regrettable to me; but, between an occasional delinquency on my part and the facile promises of some of those with whom I have had to deal, the explanation may be found.

As the Arkansas Medical Society has not had money with which to pay its current bills, nor has been in a financial position to get real competitive bids for the publication of the Journal, there was no alternative but to accept the offer of that house

which, on account of its publication business, was able to carry our account on credit. Therefore, following what had been previously done, I renewed the contract for the publication of the Journal with the Kellogg Printing Company.

On January 1, 1909, I was informed that there would be a change in the business of this concern, and that it would discontinue all publications of the character of the Journal. In order to corroborate this report, I called on the manager of the said concern, who informed me that such report was true, but, as our contract was unmaturred, he would guarantee its fulfillment, and assured me that under the new arrangement they would be in a better position than previously to render better service. Under the change, conditions improved, and for the first time the January number came out on the publication date.

The copy for the February Journal was furnished, in this instance, about ten days late. The proof of the copy not being furnished me for correction at the usual time, inquiry was made to determine the delay. I was informed that certain special editions of country newspapers had precedence over our publication, and there would be a delay of at least ten days before composition would be begun. At the expiration of this time I again demanded the proof, and was informed that, on account of certain orders received from headquarters, they would be unable to publish any more numbers and could not finish the whole number. The February number at this time was about three-fourths set, and as the type-setting machines and presses had been torn down and removed, there was little prospect of even getting this number printed. In this extremity I demanded a fulfillment of the contract, or that others be employed to do the work for us. I was answered with the reminder that, as our Journal was published on credit, they could not afford to pay cash to other concerns to do the work for us. I called upon Dr. C. P. Meriwether, Councilor of the Eighth District, to assist me in this matter, and after an interview with the manager of the Kellogg Printing Company it was agreed that the Central Printing Company should be employed to finish the unfulfilled part of the contract, provided I would pay that company the bills for printing as they matured; at this time funds were being received from assessments and this was agreed to, and our account terminated with the Kellogg Printing Company and opened up with the Central Printing Company. The March, April and May numbers, completing the whole number, were published by the Central Printing Company in a most satisfactory manner. Thus ended a contract that was made at a time when nothing better could be secured, and, to be fair to all concerned, was an accommodation to the society at the time it was made.

Permit me to say that the cause of delay in the regular appearance of the Journal was not altogether due to the Kellogg Printing Company, for many times, on account of the prodigious work involved, I was delinquent in my duties. But at no time should the Journal ever have been unreasonably delayed.

I feel that this complete and rather lengthy explanation is due the society, and I hope will be sufficient to temper some of the unjust, and at times acrimonious, criticism to which I, as editor, have been subjected.

Editor of the Journal.

On account of the constantly increasing duties of the secretary, I would suggest that the council do not appoint the secretary of the society editor of the Journal. The work involved is too much for one person. Justice to both positions demands a severance.

Fiscal Year.

I desire to especially call your attention to the importance of fixing a fiscal date long in advance of the annual sessions. As this action would require an amendment to the constitution, the suggestion is offered that a resolution be adopted covering these points until such proposed amendments shall have been passed.

On May 17, 1909, after the liquidation of all outstanding obligations, I deposited with Dr. J. W. Scales, treasurer, \$1,099.63. So far as I am aware, this is the first time in the history of the society when such a sum has been in the treasury after all current obligations have been paid. Since assuming the secretaryship two years ago, it has been my constant endeavor to be able to make such a report as I submit at this time, and I am only able to do this as the result of the co-operation of the officers and members of the society.

Respectfully submitted.

MORGAN SMITH, Secretary.

President: You have heard the report. If there is no objection, the report will be referred to the council.

The next order of business was the report of the treasurer.

TREASURER'S REPORT.

1908.

To the House of Delegates, Arkansas Medical Society:

Gentlemen—I beg to submit herewith the following report of the receipts and disbursements from May 14, 1908, to May 17, inclusive, 1909:

May 11. Cash on hand last meeting.....\$ 91.47
May 14. Receipts 1,653.23

Total receipts 1,744.70
Less vouchers 35.60

Amount deposited in bank..... 1,709.10
September 2. Deposit 35.90
May 17, 1909. Deposit by Dr. Smith..... 1,099.63

Total deposits shown by bank..... 2,844.63
Amount the secretary, Dr. Smith, had on deposit subject to his check..... 2,670.23

Total\$5,514.86

On deposit at bank as shown by bank book.\$1,099.63

Vouchers Returned.

1908.

May 22. No. 160.....\$ 257.50
May 22. No. 161..... 600.00
May 22. No. 162..... 75.00
May 22. No. 163..... 12.50
May 26. No. 164..... 800.00
No. 165..... 50.00
June 21. No. 166..... 300.00
July 7. No. 167..... 7.00
August 10. No. 168..... 2.55
August 30. No. 170..... 150.00
August 20. No. 169..... 15.00
September 2. No. 171..... 35.90
September 8. No. 172..... 5.00
October 17. No. 173..... 10.00
October 27. No. 174..... 125.00
December 9. No. 175..... 12.50
November 13. No. 176..... 5.00

1909.

January 18. No. 177..... 5.00
February 2. No. 178..... 4.00

February 4. No. 179.....	65.00
February 20. No. 180.....	15.00
March 1. No. 181.....	8.50
March 8. No. 182.....	5.60
March 11. No. 183.....	3.50
April 1. No. 184.....	7.50
April 3. No. 185.....	5.00
April 10. No. 186.....	40.70
April 15. No. 187.....	2.10
April 29. No. 188.....	83.15
May 16. No. 189.....	10.00
May 7. No. 190.....	400.00
May 14. No. 191.....	101.42
No. 192.....	2.25
May 15. No. 193.....	648.21
No. 194.....	145.35
May 17. No. 195 (498).....	400.00

Total Vouchers received.....\$4,415.23
Balance on hand..... 1,099.63

\$5,514.86

J. W. SCALES, Treasurer.

President: You have heard the report of the treasurer. If there is no objection, it will be referred to the council.

The next order of business was the report of the chairman of the council.

Dr. Breathwith: In the absence of the chairman of the council, I would ask for a little further time for our report.

President: There being no objection, the request will be granted.

The next order of business was the report of the Committee on Scientific Work.

REPORT OF COMMITTEE ON SCIENTIFIC WORK.

Your Committee on Scientific Work beg to report that we have kept in close touch with the various section officers and have prepared a program which we hope will prove interesting and of scientific value. All the essayists have been selected with care, and we believe you will agree with us that the papers bear evidence of high character. What promises to be of unusual interest is the public meeting arranged for the Arkansas Association for the Relief and Control of Tuberculosis.

We arranged the program with a view of having fewer papers—papers that we trust will prove of interest and worthy a place in the Journal of the society, hoping thereby to have a program that will not be monotonous and one that will elicit the attention of those present.

The by-laws provide that the Section on Scientific Work “shall determine the character and scope of the scientific proceedings of the society for each session.” We recommend that this committee hold one or more meetings, months in advance of the regular session, and arrange the scientific work in keeping with the advances in medical science. This being

done, the various section officers should be communicated with and an especial effort made to secure only such papers as are of decided merit. We also believe there ought to be a better understanding between this committee and the section officers as regards the duties of each, with a view of obtaining a better balanced program.

Respectfully submitted.

W. S. STEWART, *Chairman*;
MORGAN SMITH, *Secretary*;
A. C. JORDAN.

Dr. Barry: I move that the report be accepted and adopted.

President: If there is no objection, the report will be adopted.

The report of the Committee on Public Policy and Medical Legislation was next in order.

Secretary: I am informed that the chairman of this committee will be here this afternoon. He has quite an important report to make, and I would ask that you pass that over until he arrives.

President: If there is no objection, the report will be passed.

The report of the chairman of the Board of Visitors to the Arkansas Medical Colleges was passed, Dr. Jelks not being present.

The report of committee to perfect an organization for the relief and control of tuberculosis was next in order.

Dr. Shibley: I have my printed report, but it is not a very long one, which I wish to distribute along with a copy of the constitution and by-laws of the Arkansas Association for the Relief and Control of Tuberculosis. I want you to take them home with you and bear in mind that we are engaged in a great crusade against the great white plague.

REPORT OF COMMITTEE.

To the House of Delegates of the Arkansas Medical Society:

GENTLEMEN—Pursuant to appointment by the president of the Arkansas Medical Society, your committee met in the Supreme Court rooms in Little Rock on September 22, 1908, at 9:00 a. m. Present: Dr. J. S. Shibley, Paris, chairman; Dr. W. B. Lawrence, Batesville; Dr. D. C. Walt, Little Rock; Dr. H. C. Dunavant, Osceola, and Dr. M. G. Thompson, Hot Springs, Secretary. Governor-elect Geo. W. Donaghey, Chief Justice Joseph M. Hill and Dr. A. E. Sweatland were present by invitation.

Constitution and by-laws of the Arkansas Association for the Relief and Control of Tuberculosis were adopted, and are herewith submitted for your approval.

The following officers and directors were elected:

President, Dr. J. S. Shibley, Paris; first vice president, Dr. W. B. Lawrence, Batesville; second vice president, Dr. H. C. Dunavant, Osceola; treasurer, Hon. W. H. H. Shibley, president First National Bank, Van Buren; secretary, Dr. M. G. Thompson, Hot Springs.

Directors, in addition to the above officers: Dr. D. C. Walt, Little Rock; Dr. A. E. Sweatland, Little Rock; Dr. M. Fink, Helena; Dr. J. T. Clegg, Siloam Springs; Dr. H. Moulton, Fort Smith; Dr. A. C. Jordan, Pine Bluff; Dr. Nettie Klein, Texarkana; Dr. E. K. Williams, Arkadelphia; Dr. Anderson Watkins, Little Rock; Dr. H. D. Wood, Fayetteville; Dr. Leonidas Kirby, Harrison; Dr. Joseph Case, Batesville; Chief Justice Joseph M. Hill, Little Rock; Prof. Geo. B. Cook, Little Rock; Prof. Junius Jordan, Pine Bluff; Hon. H. L. Rammel, Little Rock; Judge Jacob Trieber, Little Rock; Hon. J. N. Heiskell, editor Gazette, Little Rock; Hon. Clio Harper, editor Democrat, Little Rock; Hon. O. L. Miles, Fort Smith; Hon. R. E. Wilson, Wilson; Prof. B. W. Torreyson, Little Rock.

Immediately after the meeting of your committee, September 22, 1908, two of its members, Dr. H. C. Dunavant and the chairman, visited the World's Congress on Tuberculosis at Washington City, where we had opportunity to hear the world's foremost tuberculosis experts and to inspect the latest means and methods of combating the great white plague.

The semiannual meeting of the association was held in Little Rock, January 26, 1909. Present, besides the five members of your committee: Drs. A. E. Sweatland, Morgan Smith and Anderson Watkins, Judges Joseph M. Hill and Jacob Trieber, and Profs. B. W. Torreyson, of Little Rock, and Junius Jordan, of Pine Bluff, and Dr. J. F. Henry, of Camden. Governor Donaghey was present by invitation.

The constitution and by-laws were amended as submitted herewith, and all the old officers and directors were reelected to serve for the ensuing year.

A bill for "An act to provide for the location, erection, organization, management and maintenance of a State sanatorium for the treatment of tuberculosis in the State of Arkansas," etc., which had been prepared by

Senator Oldham, at the instance of Judge Hill, was revised, amended and adopted in the exact form in which it was finally passed by the recent session of the legislature.

The thanks of your committee are due to Judge Hill, Senator Oldham and Governor Donaghey, and to the Gazette and Democrat for their unwavering support of the sanatorium bill, and to Dr. Morgan Smith, President Joseph T. Clegg and Dr. J. D. Southard, of Fort Smith, the two latter of whom left their business to visit the legislature in April in company with your chairman, urging the passage of the bill. Your chairman had an hour's audience with the Senate Committee on Public Health in advocacy of the sanatorium bill, and was accorded the privilege of making an address in the hall of the House of Representatives in the same behalf. It is a matter of no little pleasure to your committee that the sanatorium bill has become a law, marking the first official step of what we hope will prove to be a successful warfare against civilization's greatest blight—tuberculosis.

In addition to these labors of your committee, your chairman had the privilege of presenting the campaign against tuberculosis before the Arkansas Conference of the M. E. Church, South, at Van Buren; the State convention of the Federation of Labor, at Fort Smith, the State Good Roads Convention and the State convention of the Farmers' Union, both at Little Rock, by all of whom it was favorably received; also an address under the auspices of the Typographical Union of Fort Smith, attended by the Sebastian County Medical Society, in a body, after which the Fort Smith Association for the Relief and Control of Tuberculosis was organized, being the first local anti-tuberculosis society in the State.

A bundle of anti-tuberculosis literature for distribution was sent to every county clerk, and two letters were sent to every member of the legislature. Money for printing and postage was obtained, \$35.00 contributed by members of your committee (\$5.00 each), and \$40.00 proceeds of two lectures delivered, one at Paris and one at Booneville, in which forty persons gave one dollar apiece for annual membership in the Arkansas Association for the Relief and Control of Tuberculosis. Everywhere the people have received the work of your committee most favorably, and it only needs an intelligently directed and vigorously prosecuted campaign of education to revolutionize public sentiment in Arkansas and place the State alongside her most progressive sisters in the war against tuberculosis.

Your committee endeavored to get a clause inserted in the sanatorium bill providing for an appropriation to be expended under the direction of the association in the dissemination of information on the subject of tuberculosis. In this we were not successful. We were not able to make the lay members of the association see that the campaign against tuberculosis is first and last a campaign of education, and that the battle is to be won in the homes of the people.

A sanatorium is only one of the incidents of the war, and by no means the most important one. If it were to cure a hundred cases annually, that would be only one in thirty of the new cases that contract the disease every year. Prevention should be our aim, and education is the means of attaining it. The legislature of Iowa in 1907 appropriated \$10,000.00 for dissemination of information on tuberculosis. That amount judiciously expended in Arkansas would prevent ten times as many cases as the sanatorium can cure. The sanatorium, however, may be made an efficient educator of the people, and this will be its chief benefit. As the sanatorium was the only measure on which all the workers could agree, your committee thought best to join in with them and lend all our energies to its attainment.

Having attained this much, we must now continue a systematic propaganda of prevention against tuberculosis.

Respectfully submitted, for the committee.

J. S. SHIBLEY, *Chairman.*

CONSTITUTION AND BY-LAWS OF THE ARKANSAS ASSOCIATION FOR THE RELIEF AND CONTROL OF TUBERCULOSIS.

(Adopted September 22, 1908; Amended January 26, 1909.)

Article I—Name.

Section 1. The name of this organization shall be "The Arkansas Association for the Relief and Control of Tuberculosis."

Article II—Purposes.

Section 1. The purposes of the association are:

1. Dissemination of knowledge concerning the causes, treatment and prevention of tuberculosis.
2. Investigation of the prevalence of tuberculosis in the State of Arkansas, and the collecting and publishing of useful information concerning it.

3. Securing of proper legislation for the relief and prevention of tuberculosis.

4. Coöperation with the public authorities, State and local boards of health, the National Association for the Study and Prevention of Tuberculosis, medical societies and other organizations in approved measures adopted for the prevention of the disease.

5. Promotion of the organization and work of local societies in all parts of Arkansas.

6. Encouragement of adequate provision for consumptives by the establishment of sanatoria, hospitals, dispensaries, etc.

BY-LAWS.

Article I—Membership.

Section 1. The association shall consist of active, honorary and life members.

Sec. 2. Any person who shall pay \$1.00 or more into the treasury shall become an active member for the year in which such payment is made.

Sec. 3. A person may be elected to honorary membership at any regular meeting of the society by a majority vote of those present.

Sec. 4. Any person may become a life member by the payment of \$25.00 into the treasury; payment may be made in five annual installments of \$5.00 each.

Article II—Officers.

Section 1. The officers of this association shall be a president, two vice presidents, secretary, treasurer, and board of directors.

Sec. 2. The president, vice presidents, secretary and treasurer shall perform the customary duties of their respective offices and shall constitute an executive committee, whose duty it shall be to carry on the work of the association during the intervals between the meetings of the board of directors and to make a full report of the same to the next meeting of said board.

Sec. 3. The board of directors shall consist of twenty-five members, with the president and secretary as ex-officio members, and shall have entire control of the business of the association and of the expenditure of its funds, except where otherwise provided for by the by-laws; and it shall appoint such subordinate officers and agents as shall be necessary to carry out the work of the association.

Sec. 4. The board of directors shall not incur indebtedness in excess of the amount of money in the hands of the treasurer, except

on a vote of two-thirds of the members present at an annual meeting.

Article III—Meetings.

Section 1. The association shall meet semi-annually on the fourth Tuesday in January, and at the annual meeting of the Arkansas Medical Society.

Sec. 2. The president may call a special meeting of the board of directors upon a written notice to each member at least six days before the time of such meeting.

Article IV—Election of Officers.

Section 1. The officers and board of directors shall be elected at the semiannual meeting in January.

Sec. 2. All vacancies arising shall be filled by the board of directors until the next semi-annual meeting.

Article V.

Section 1. All literature and lectures must receive the approval of the board of directors.

Article VI—Amendments.

Section 1. New by-laws may be adopted, or amendments to the constitution may be made by a majority of the board of directors, except that any amendment permitting the creation of a permanent debt, or of a floating debt in excess of funds on hand, must be sanctioned by a vote of the members.

Dr. Shibley: I only wish to add that your chairman has had the privilege, and I deem it a privilege, of spending about six weeks away from my home and my business, and about \$150.00 of my own money in prosecuting this campaign.

Dr. Thibault moved that we extend to the chairman and the committee a vote of appreciation and thanks on the success of their efforts in regard to this matter. The motion was adopted.

President: What disposition do you wish to make of the committee?

Dr. Young: I move that the report be received, and that the committee continue with instructions to control this work as much as possible.

Dr. Shibley: The Association for the Relief and Control of Tuberculosis has now become at least a tentative organization, and it is now up to the medical profession and the State of Arkansas to put in your membership in that association. You will notice by reading that constitution that we have two classes

of members—one is an active membership, which is obtained by the payment of one dollar, to last one year. The next year, if you keep up your membership, another dollar. Then a life membership, which costs \$25.00, which may be paid in one payment or in five annual payments of \$5.00 each. I do not see any necessity of continuing this committee. What we want to do is for all of us to get into this Association, every mother's son of us, and pay \$25.00 into that Association, and then the Association will have something to work on. Now, I have here a little book of information for persons having diseased lungs and for others living in the same houses. That is a little book published by the National Association for the Study and Prevention of Tuberculosis. I suppose, Dr. Smith, if we have 100,000 of them printed they can be printed for two cents apiece.

Secretary: No.

Dr. Shibley: We ought to have 100,000 of these little books printed. They ought to be sent to the head of every family in the State of Arkansas—not only these books, but many other documents. I have got a valise full of them, but not here, which I obtained at the first Congress on Tuberculosis. We ought to publish a monthly journal containing about as much matter as that little book contains, and we ought to send it to the head of every house in Arkansas, and keep that up from year to year. There is no trouble to get the material to send out. We can copy them from the publications of the National Association, if we don't originate some of the literature in Arkansas. I asked the secretary of the Farmers' Union to furnish me a list of all the secretaries of the local unions. I had an idea of sending out some letters. He said it wasn't permitted; that they never gave out the names of the secretaries. I then appealed to the president of that organization, and he said the same thing. But I got the privilege of going before the State convention of that organization and making them an address, and after that their executive committee passed a resolution that the secretary furnish me with a list of the secretaries of their local unions, which he did, and how many do you suppose there were? There were 1,600 of them—a great long printed list as big as a book. If we publish this literature we can send it to the secretaries of the local unions, and they will distribute it. We can send it to the county clerks of the counties and they will distribute it. The Federation of Women's Clubs is with us heart and soul, and did important

work in securing the passage of this sanatorium bill, and they will distribute the literature. And there are various other channels through which it can be distributed. I mention these channels because we are not able to pay postage. When we met last September it was proposed that we then begin an active campaign of education, and it was suggested that we flood the State with circular letters. Governor Donaghey said, "If we are going to send out circulars, that's going to cost you something." He said that it will take \$2,000.00 or \$3,000.00 to pay the postage. The Superintendent of Public Instruction, George B. Cook, said if I would furnish him 6,000 copies of anti-tuberculosis literature he would enclose one with every letter which he sent to the white teachers of the State, thus saving us \$60.00 in postage. I furnished him 6,000 copies. What we want to do is for everyone to put in our membership into this State Association for the Relief and Control of Tuberculosis, and put our money into it. You heard the names of those men who are directors—men in all parts of the State and in all walks of life. You will find out that we can well afford to put our money in there. It will not be wasted.

Now, then, Mr. President, Thursday night Dr. Dibrell is going to read a paper which will be worthy of our serious attention, on "The Causation, Mode of Infection, Prevention and Hygiene of Tuberculosis." Prof. Junius Jordan will give us an address on "The Protection of Schools From Tuberculosis." There is another address, the scope of which I do not now recall; and after these addresses I want to get 300 members of the Arkansas Medical Society to join that association, and as many citizens of Pine Bluff and Arkansas as we can.

I do not think it is necessary for you to put further work on this committee. I want to say, as the balance of the members of the committee are absent, that I have had the hearty cooperation of every member of the committee; and I thought at one time of mentioning that in my report, but I did not do so.

Dr. Young: In view of the fact that Dr. Shibley has gone thoroughly into this matter and knows what he wants, and knows what the new organization wants, I withdraw my previous motion, with the consent of my second. I move that the report be received and that the committee be discharged.

The motion was adopted.

The next order of business was the report of the Committee on Charity Hospital, but

same was passed, the chairman being absent.

The next order of business was the report of the Committee on Publication.

REPORT OF COMMITTEE ON PUBLICATION.

To the House of Delegates, Arkansas Medical Society, Pine Bluff, Ark.:

GENTLEMEN—As chairman of the Committee on Advertisements, I regretfully beg to state that I have been unable to meet the other two members of the committee, Dr. W. B. Ellis, of Helena, and Dr. J. F. Kitrell, of Texarkana, therefore I have no report to make.

The importance of this committee is great and far-reaching for good to our profession and the public at large. A committee of this function should be retained by our society and work strenuously and faithfully begun at once.

Respectfully submitted,

C. E. WITT, *Chairman.*

Dr. Thibault: In view of the fact that in adopting the recommendations of the secretary last year we voted that the secretary be given control over all matters entering into the Journal, including advertisements, I could not see where this committee would have any duty to perform.

President: As I understand, this committee is a special committee, and was appointed for the purpose of conferring with the newspapers in regard to objectionable advertisements that might be given in the newspapers.

Dr. Thibault: That is, in the public press, and not the ads in the Journal.

Dr. Barry: I move that the report be accepted and the committee discharged.

Dr. Douglass: It seems to me that this matter is of such importance that we ought not to discharge the committee. I am not in favor of discharging this committee.

Dr. Young: There is absolutely no use of carrying on a committee that doesn't do any work. We know a committee of this character is not going to do any work. It wasn't intended that they do any work. While the work is important, and should be done, and would be a great thing and worth doing, there is no use of carrying the committee over in the name of the State society when we know they won't do anything. Such work might be delegated to one man, possibly, and some good accomplished; but when you go and put three or four or five men, living in different parts of the State, on the committee, and expect them to leave their business and look after this work, it is out of the question.

Dr. Douglas: If this committee will not do the work, then appoint a committee that will do the work. I think this is a matter of great importance. I, myself, took up the question with a religious paper of our State, and did what I could to get that paper to withdraw objectionable advertisements, without any effect whatever. I finally discontinued my subscription to the paper, and notified the editor that I would be glad to subscribe again whenever he did withdraw those ads, as he would inevitably have to do finally. And I want this society to bring to bear pressure upon the press of the State so that these objectionable advertisements may be withdrawn.

Dr. MacCammon: This old committee will be discharged and a new one will be appointed.

President: Not unless provided by the House of Delegates. It is not a regular committee at all.

Dr. Watkins: I believe the result attained by the doctor on my right (Dr. Douglas) individually, probably would be the result obtained by the committee. I personally do not favor retaining a committee of that sort.

Dr. Butler: I move that we lay this over until tomorrow.

President: We are discussing the report of the committee. The committee has already reported.

Dr. Barry: Regarding that question, I moved that the report be received and the committee discharged, thinking that under the proper head it would come up again and a new committee would be appointed. That was my object in making the motion. It was not intended to do away with that line of work. I think a resolution will be in order to appoint a new committee to do that work.

The motion being put, was carried.

The next order of business was the report of the committee to arrange for the admission of medical students to the Arkansas medical colleges, Dr. Thibault being the only representative of that committee present.

Dr. Thibault: Our committee was appointed, consisting of three members, Dr. Warren, chairman, and Dr. Yates, I think, was the other member besides myself to provide for some entrance examination to persons wishing to enter the medical colleges in the State to study medicine. This is of great importance, and, as I understand from the faculty of the colleges, they want some arbitrary board to pass on the qualifications of students entering the colleges. There is some difference as to what the standard ought to be. I wrote to Dr. Warren shortly after receiving notice

from the secretary of my appointment, and so far I have not heard from him. There has never been any meeting of the committee; it has never been called together by the chairman. Consequently, the committee has no report to make, because there has never been any meeting called.

Dr. Hay: I have a resolution that I want to introduce.

RESOLUTION FOR THE ADOPTION OF A NEW SECTION
IN THE AMERICAN MEDICAL ASSOCIATION,
KNOWN AS SECTION ON VENEREAL GENITO-URINARY
DISEASES.

Whereas, It is a lamentable fact that not sufficient attention is paid by the general profession to the study of syphilis and its treatment, and as genito-urinary diseases are likewise largely treated as of minor importance in general practice. This condition, we believe, is caused by the neglect and ignoring of these important diseases by our National Association. We consider the time is ripe for the creation of a new section in the American Medical Association.

Whereas, All the recent progress and developments in the pathology of syphilis has been made in Europe. The pathology, treatment and armamentarium in modern genito-urinary work all comes from the other side, and seems to me a sad commentary on the American profession to allow themselves to slumber while our European brothers are doing such active work in this rich and prolific field of labor.

Syphilis and gonorrhea are responsible for as much suffering and unhappiness in this world, I firmly believe, and in many instances more so, than tuberculosis.

Anyone presenting a paper on syphilis before the American Medical Association is tackled on in some unimportant position, as a rule, on the program, in the Section of Cutaneous Medicine, or, if one is present, on ordinary genito-urinary subjects, it is referred and placed in some obscure position in the Section on Surgery.

As most syphilographers are genito-urinary men, and very few dermatologists are syphilographers; as the two diseases, syphilis and gonorrhea, are generally associated together in the minds of the laity, it is perfectly natural that any member of the profession who makes a specialty of either naturally becomes a specialist in both, resulting from the class of patients who consult him. Therefore, be it

Resolved, by the House of Delegates of the

Arkansas Medical Society, now assembled, that we request the American Medical Association, at its next meeting in Atlantic City, to create a new section for the special study of these important diseases, this section to be known as the Section of Venereal and Genito-Urinary Diseases.

Dr. Young moved that the resolution be adopted. Carried.

Dr. Eberle: I want to say that I am considerably interested in the financial condition of our society. Your suggestion in your preliminary report, Mr. President, was to increase the dues of membership. If I understand the treasurer's report correctly, we have a balance on hand of \$1,000.00 in round numbers now. I would like to know whether we have any indebtedness that will absorb that \$1,000.00. I will ask the secretary that question.

Secretary: There is no indebtedness at all. We are out of debt.

Dr. Eberle: Then I have no motion. I was going to make a motion that the Board of Councilors be requested to investigate the question of increasing the dues, but if we have that much money on hand we are in very good financial condition. Hence I have no motion to offer.

Dr. Shibley: There will be a year before we will get any more.

President: I think not. We are in better condition financially, since I have read the secretary's report, than I was under the impression when I wrote the recommendation.

Dr. Guthrie: Has the outgoing secretary been paid anything for the past year's work?

President: I think not, for the present year's work.

Secretary: The secretary has no salary.

Dr. Guthrie: Has he been paid anything? Secretary: No.

Dr. Scates: The secretary has not been paid his usual salary, and the councilors have not been paid for two years. It is not right for us to expect those councilors to travel over the country at their own expense, and we have some money to pay for it. If we haven't any money to pay for it, I don't suppose there is any doctor here who would not be willing to take the money out of his pocket and spend it, if necessary. The doctor's whole life is made up in working for others and for the benefit of other people to the detriment of himself. For instance, in the case of the crusade against tuberculosis we are using every energy in our power to prevent a disease that directly takes money out of our pockets. I

am sure that there is no councilor who would hesitate a moment to go over the country and do the work that is required, provided it was necessary, and I am certainly in favor of paying them their expenses, or part of it, if we have the money. It takes about \$4,400.00 a year to pay the expenses of this society, including the Journal and everything. We have taken in about \$5,000.00 in round numbers, leaving a balance of about \$1,000.00. We are now in a position to go before the publishing houses and tell them we want good terms, and we want our Journal to come out on time. Heretofore we had to "play second fiddle." So I think it is a very important matter, and we should seriously consider it.

Dr. Eberle: I will make the motion that I had in mind, then, that the council be requested to take this matter under consideration and make such report as they think proper. I want to say that I hope they will not find it necessary to increase the annual dues, because I suppose every county society member knows the difficulty of collecting the two dollars annual dues. I hope they will find a way of retrenching and cutting down expenses in some way, rather than increasing dues.

The motion was adopted.

Secretary: I will state that the councilors have filed no bills of expense with me. I have no way of knowing whether they have incurred any expense to the society since the last report. All bills have been paid that were presented to me, as far as I know. We have paid all bills and have receipts for the same. For your information I will refer you to section 2 of article 7 of the constitution, which states that only "the necessary traveling expenses incurred by each councilor in the line of the duties herein imposed may be allowed on a proper itemized statement." No such statements have been referred to me. Therefore, I assume there have been no expenses incurred. If there have been, they will be filed later.

Dr. Douglas: I wish to offer a resolution.

Whereas, The Arkansas Medical Society should bring to bear upon the press of the State, both secular and religious, all the pressure it can command to secure the withdrawal of objectionable advertisements; therefore, be it

Resolved, That a committee be appointed by the president for that purpose.

Dr. Barry: I move that it be adopted.

Dr. Thibault: The resolution does not state any number to be appointed on the commit-

tee. I move as an amendment to the resolution that a committee of one be appointed by the president.

Dr. Young: I second that amendment.

Dr. Douglas: I accept the amendment.

Dr. Shibley: This reminds me of two or three years ago in the Arkansas Medical Society, when Dr. Canfield, who has since moved away from this State, told what happened in his house. His little girl, some ten or twelve years of age, had been reading one of those vile advertisements in the daily newspaper about "lost manhood." She came to him and said, "Papa, what is lost manhood?" Dr. Canfield said to us, "What could I say?" I think that we ought to enter our protest and unite against the appearance of these vile advertisements in the daily press, both religious and secular. It may be that it will not do much good. It may be we shall be "like the voice of one crying in the wilderness," but we ought to raise our voice and keep on raising it until we shall elevate the state of morality in the press of the country. And it depends on us, who know the evils of these things. We know, every one, of these advertisements about curing weak men and restoring lost manhood. It is all a fraud, as if I were to put my hand in your pocket and take the money out. We ought to raise our voice against it constantly. I believe it is a mistake to refer this to a committee of one. It ought to be made half a dozen of the strongest men in the State.

Dr. Hay: I wish to state that I cannot see where you can do any effective work except through the legislature. Pass a law prohibiting the publication and dissemination of all this kind of literature. Also, prohibiting the daily press from publishing anything in the way of a cure for private diseases. I know the daily press, as a rule, are not going to pay any attention to any committee from our society. And the method we want to pursue, if you want to appoint a committee, is to have one appointed to work on our next legislature in passing a law to that effect, prohibiting the dissemination of such literature. I think it is the best method. That is the way they did in Massachusetts.

The resolution, as amended, was carried.

Dr. Pettus: I wish to introduce the following resolution on behalf of Dr. Purifoy:

The Union County Medical Society, having adopted the resolution that no member of that society be allowed to examine any subject for a life insurance company, old line, for a fee less than \$5.00, as a delegate from that county society I come to this society instruct-

ed to offer such a resolution for the State Medical Society, which resolution I hereby offer.

Dr. Barry: I move that the resolution be adopted.

Dr. Hay: I second the motion.

Dr. Walt: I want to understand whether it was restricted to old-line insurance companies. If so, I would be opposed to it.

Dr. Barry: I will offer an amendment to the resolution that it cut out that word "old-line," and that it should read "any insurance company." I was medical examiner for about three companies, and when they concluded to cut the rate I handed in my resignation, and was glad to do so. I did not think it was right for us to make any examination for an insurance company under \$5.00. I move that the word "old-line" be stricken out.

Dr. MacCammon: I remember quite well that this subject has been up before this society before. About the time that this subject became general throughout the United States I was councilor for one district of this society, and I took it up as councilor with the county societies that I visited. There is absolutely no need of this society trying to tell the county society what it shall do. The basis of the organization that we now have in the medical profession in these United States is founded on the fact that the county society is master of its own affairs. It is well and good if the physicians of the county can get together and agree to abide by such a decision. But unfortunately there are men in many, many counties that will not join the society and will not hold the fee up to \$5.00, and it will be a waste of time for this society to pass any such resolution. At the time I just referred to, when I was councilor, the State agent of the New York Life seemed to get the idea that I was leader of the thing in the State, which, of course, was erroneous, but he bothered me greatly. He knew that I, as councilor, was agitating the subject in my district. He had one doctor in that county to make all the examinations, because he got that doctor to do it for \$3.00. The other men lost the work; consequently they would not hold together. I am glad to know this one county did as the resolution states, and I would like very much indeed to see every county society in the State have a resolution, as a county society, making a minimum fee of \$5.00 for any sort of life insurance examination; but it's a matter of impossibility. I hardly think it worth while for the society to try to shoulder something on the

county society that can never be accomplished.

Dr. Thibault: We have had the pleasure repeatedly, for three years, of voting down this resolution. Every time we voted it down we referred the matter to the county society, and let them do what they pleased with it. When the county society votes one way or the other upon it, it is necessary for them to attempt to make all other county societies do the same thing. Dr. MacCammon said it goes down to the county society. It goes further. It depends altogether on the backbone and stamina of the individual that makes the examination; and, whatever resolution this society or any other society passes, some of them are not going to do it, because they can't afford to lose the \$3.00, but would rather lose their self-respect, or something else. The Pulaski County Medical Society tried to adopt this resolution, and one man I know, who belonged to it for twenty years, said he would resign if they adopted it. Of course, that man would resign if we adopted it in the State society. His resignation would not make any difference, but the question is whether it would be effective if we adopted it. And if we adopt it here today there are men who will make examination tomorrow, and next week, and next year, for the same fee that they charge now.

Dr. MacCammon: I would settle the remarks made by stating that the County Societies in the various States have adopted this rule; that the New York Life Insurance Company now pays practically everywhere \$5.00. There are very few insurance companies that pay under \$5.00. I understand in my county the New York Life pays \$5.00. I understand in some places where they don't have to, they don't. I make a motion that we table the resolution.

Seconded..

Dr. Purifoy: I would like to say something.

Dr. Thibault: I rise to a point of order. A motion to table is before the house, and is not debatable.

President: The question of an amendment is now before the house.

Dr. Thibault: The motion to table takes precedence of every amendment.

Dr. Purifoy: I would like to be heard on my own resolution, introduced by me for the Union County Medical Society.

President: You have a right to be heard upon your resolution.

Dr. Purifoy: This resolution was adopted by the Union County Medical Society nearly two years ago. I am glad to say that we have lived up to it. The class of doctors that the doctor speaks of, we don't have in our society, and I don't think they ought to be members of the Arkansas Medical Society. As for life insurance companies being masters of their own affairs, they are not masters of their own affairs in Union County. We do not make any examinations there for less than \$5.00. We have not a doctor in Union County, who is a graduate, who is not a member of the Union County Medical Society. We have never had one examination made since this resolution was adopted for less than \$5.00. We had one doctor who said that he would resign as a member of the county society before he would be forced to make these examinations for nothing less than \$5.00. But he did not resign, and now he is getting \$5.00 for each examination that he makes. We have never had any life insurance company to withdraw from our county on that account; all of them pay \$5.00 in Union County, and I see no good reason why we should not have the same thing all over the State.

President: The motion before the house is to table the resolution.

Carried.

Dr. Purifoy: We have had some complaint in our society about our councilor not visiting our county society. Our society has never been visited by a councilor from this district. He has visited our town one time, but never visited the Union County Medical Society, and I was asked to simply mention the matter.

The next order of business was the selection of a Nominating Committee.

Dr. Young: I move that the members of the Nominating Committee be announced the first thing in the morning. I make this motion for the reason that there are a good many counties not represented, and there will be quite a number more in the morning, and we can hold a caucus and get the Nominating Committee on foot then.

Seconded.

Dr. Barry: It is not our fault that those men are not here. I think there are enough here to go ahead, and I think we ought to go ahead. Tomorrow is the scientific program, and we have some other business. We are behind time now, and we ought to get through.

Secretary: The constitution provides that the Nominating Committee shall be appointed by the House of Delegates on the first day of the annual session.

President: The motion is out of order.

Dr. Thibault moved that the delegates representing the several councilor districts will hold informal caucuses and name one man from each councilor district as a member of the Nominating Committee. Motion adopted.

Dr. Barry moved that we take a recess of five or ten minutes to give them time to do that. Motion adopted.

On reconvening, the delegates from the several councilor districts suggested the following names as their choice to serve on the Nominating Committee:

First Councilor District—J. W. Morris, Denton.

Second Councilor District—R. C. Dorr, Batesville.

Third Councilor District—H. Thibault, Scott's.

Fourth Councilor District—J. W. Dixon, Douglas.

Fifth Councilor District—L. F. Magee, Crossville.

Sixth Councilor District—L. F. Cosminsky, Texarkana.

Seventh Councilor District—L. H. Barry, Hot Springs.

Eighth Councilor District—J. S. Westerfield, Conway.

Ninth Councilor District—C. T. Cannaday, Cotter.

Tenth Councilor District—J. W. Webster, Siloam Springs.

Dr. Thibault: The councilor districts simply name these men. It does not exclude the right of anybody to nominate anyone else. The House of Delegates, as a whole, has to vote on the election of the members from the councilor districts.

Dr. Eberle moved that the names be read and elected as members of the Nominating Committee. Adopted.

Dr. MacCammon: Under the head of "Unfinished Business," I desire to bring up a subject you mentioned in your address to the House of Delegates as to the recommendation that the State Board of Medical Examiners make a report to this society of their doings. Of course, there are only two members of the board present. We have conferred, and, while we certainly could have no objection whatever to making any such report to the society, the fact remains that you make an annual report to the Governor of the State, which is the property of the State as well as the society. The fact also remains that our secretary is possibly the most overworked medical man in the State. This condition has been aggra-

vated by reason of the fact that the undergraduate, not only in this State and the schools of this State, but all over the country, have understood that this was their last chance to get before the board. They understood some medical legislation was pending, and the mail has occupied more of the secretary's time than would be possible for one man. Besides, these examinations have been heavy, and the amount of work connected with it has been very heavy. I feel that it would be unjust now to ask of our secretary, who serves practically for no pay whatever, to make a detailed report of the doings of the board to this society. The board will, indeed, be glad to furnish the society with a copy of the report which is made to the Governor each year, which includes practically all that could be included in a report. The acts of the board have been published in the Journal of the State society from time to time, and they are very complete in themselves. The board has a carbon file system. A request concerning any member can be answered in a few minutes. However, if the society desires a special report should be made to them, the board sees no good reason why it should not be made. We might have to ask your indulgence for a little time and do the best we can.

Dr. Thibault moved that we adjourn until the first interval after the general session in the morning. Seconded. Carried.

First General Session.

WEDNESDAY, MAY 19, 1909.

The meeting was called to order by Vice President B. D. Luck, of Pine Bluff, at 9:30 a. m., in the auditorium of the Y. M. C. A., which was especially arranged for the occasion.

Vice President Luck invited Rev. Dr. J. I. Norris to invoke the divine blessing.

Rev. Norris: Almighty God, Thou hast made the earth, and Thou hast made man to be sovereign and master of all Thy work; Thou hast made both for Thy glory. We are Thy servants. We thank Thee for the exquisite perfect harmony that exists among all of Thy laws, and we thank Thee that, little by little, here and there, we are becoming masters of the great laws which Thou hast established to regulate and beautify, redeem and glorify this planet. We thank Thee for our lives, for life is Thine. Thou givest it, and we live, and move, and have our being in Thee. The circumambient

ether is Thine; the earth upon which we walk is Thine; we could not live without Thy care. We thank Thee that Thou hast brought us to see this day, and confront these duties, and enjoy these pleasures.

"And now we wait before Thee for Thy blessing. O God, merciful and almighty, look upon the earth. It is sick. The whole earth is filled with screams of pain. Walk Thou in the presence of Thy servants among the cots of pain and suffering, and heal and soothe and calm and bless. As these, Thy servants, study in the great laboratory of nature, using the most sovereign means which Thou hast given them to go about imitating the Great Physician, may Thou ever give to their care and skill more and more wisdom, that disease may be eradicated and suffering soothed, and the whole sick earth made well. We believe that there is a tree, the leaves of which are for the healing of the nations, and there is a river whose flood is a flow of the water of life. Lead us, we pray Thee, more and more into a perfect knowledge, so that we and our children, and our children's children, shall in the generations to come live on this planet, healed, cleansed, glorified and redeemed, a monument to Thy power, a memorial of Thy grace. Again we commit unto Thee these, Thy servants. We are thine; use us for Thy glory, for Jesus' sake. Amen."

Dr. Luck: Gentlemen of the Arkansas Medical Society, I now wish to introduce Hon. W. L. Toney, mayor of our city, who will bid you welcome.

ADDRESS OF WELCOME ON BEHALF OF PINE BLUFF
BY MAYOR W. L. TONEY.

"Mr. President, Ladies and Gentlemen of the Arkansas Medical Society:

"It is indeed a pleasure for me to have the honor, on behalf of Pine Bluff, the hub of our great State, to extend to you a most cordial welcome to our city. Pine Bluff is a city of progress and improvement. She is the home of factories, foundries, iron works, wholesale commission houses of every description and kind. She is also the great cotton center of Arkansas. She is the home of hospitals and schools of the highest type, and churches of every denomination, of which not only Pine Bluff feels exceedingly proud, but the citizenship of this State appreciates the high schools and splendid churches of this city. As I said before we have here a city of progress and improvement. We have ten or twelve miles of paved streets and thirty-five or forty miles of sanitary sewers. We believe her to be one of

the healthiest cities in Arkansas. We think the death rate in Pine Bluff is lower than that of any other city or town in Arkansas notwithstanding the fact that we have as bona fide residents of this city regularly licensed and commissioned practicing physicians to the number of forty-five or fifty.

"In addition to the things I have just mentioned, one other thing that makes Pine Bluff in the front rank of Arkansas cities is that we have about twenty-seven thousand, five hundred boosters in Pine Bluff that daily push her to the front, standing on the street corners seeing her grow.

"On behalf of the citizens of Pine Bluff I want to extend to you a most cordial welcome. We are indeed glad to have you with us. We realize that we have the intelligence of Arkansas in our midst, and we therefore welcome you.

"I want to say, gentlemen, that doctors, as a rule, never fear a policeman; but I had a confidential talk with the chief of police the other day, and he informed me that during this meeting the police will be out of commission in Pine Bluff.

"What I want to say to you is this: I take pleasure, Mr. Chairman and ladies and gentlemen, in delivering you the keys of Pine Bluff during your stay, and I trust that when you have finished your labors and have returned to your respective homes that you will ever remember this as being a trip of pleasure and profit. Again, ladies and gentlemen, I extend to you the most courteous and most hearty welcome to our city."

* Dr. Luck: I now take pleasure in introducing Dr. C. K. Caruthers, President of the Jefferson County Medical Society, who wishes to welcome you on behalf of the members of our county society.

ADDRESS OF WELCOME BY DR. C. K. CARUTHERS,
PRESIDENT JEFFERSON COUNTY MEDICAL
SOCIETY, TO ARKANSAS MEDICAL SOCIETY.

"Mr. President, Officers and Members of the Arkansas Medical Society:

"There are few duties more pleasant than that of acting as host to one's friends, particularly when they are distinguished guests. The pleasures and comforts which the welcome visitor receives in our homes are very small as compared with our gratification at being permitted to show how open-hearted we can be to those who challenge our respect and our love. This is no less true of official, social and

municipal bodies than it is of individuals; and so I have peculiar pleasure, acting for the Jefferson County Medical Society, whose representative I have the honor to be, in welcoming to our midst the physicians and surgeons who compose the Arkansas Medical Society, together with their wives and daughters.

"I assure you, Mr. President, that it was a source of deep regret when, some time ago, we found ourselves unable properly to care for and entertain this body; but I am pleased to say that since that time Pine Bluff has made such substantial progress along many lines that it is not probable that any other distinguished association will ever again be turned from our doors for want of suitable and sufficient accommodations; because to the broad hospitality which we have ever been ready to offer we have added excellent convention and banquet halls, well-appointed hotels and hostelries, and many comfortable private homes.

"We welcome this medical society, first of all, because its members largely are strangers, and because the Good Book warns us to 'be not forgetful to entertain strangers: for thereby some have entertained angels unawares.' (Hebrews, 13:2.) We do not know, we cannot tell, but that seated in this presence is some physician or surgeon who shall, by the discovery of a sovereign remedy or method as yet unknown to medical science, become, indeed, an angel in the midst of suffering.

"But not alone to you, gentlemen, do we extend our welcome. There comes to my mind at this hour the unselfish sympathy and encouragement which a certain physician's wife, very well known to me, has been to him, and as I remember that such a physician's wife is known to every other practitioner in Jefferson County; yes, as I remember that no man in this county could practice medicine except as there was in his home a sensible wife, who believed in him, who was gracious, tactful, and kind to all, and who would give him willingly to the calls of the diseased and the sick, I feel that I would be ungrateful to that first woman of whom I spoke, and to all that body of women whom we know as physicians' wives, if I did not extend to your wives, you members of the Arkansas Medical Society, a welcome even more cordial than that we give to you.

"The Jefferson County Medical Society welcomes you healers of our State, because you are our brothers—laborers in the same great field, bound by the same high code of professional conduct, and possessed of the same beautiful ideals in the service of those whose bodies are diseased and sore. This

code and these ideals we hope to raise by our convention here; for every time we meet we are reminded that the aim and object of this organization is to 'promote friendly intercourse among the physicians' and 'foster the growth and diffusion of medical knowledge,' with the view of alleviating the many pains that flesh is heir to, and thus add happiness to human existence.

"We welcome you on behalf of all the people of our city. The men who are carrying the daily burdens of life are interested in your deliberations here, because to you they must look for guidance and direction in keeping their bodies fit for service for themselves and their loved ones. It is their wish that the keys of the city be delivered to you; the children of our homes have a vital interest in the purposes of this convention. The future of the State is to be in their hands; but before that future dawns, many times will their little bodies and lives rest in the care of physicians, and of Him who blessed little children in the days of old. (Mark 10:13-16.) And so I deliver their childish message, and beg you to abide with us for a season. The mothers, sisters, wives and daughters of our city, the ones who are, more than any other persons, dependent for health and happiness upon your ministrations, have expressed the desire that you be made to feel at home; and, ladies and gentlemen, you are at home.

"If I seem to boast, I believe my fellow-workers will pardon me; but I cannot refrain from the final statement that the Jefferson County Medical Society welcomes the Arkansas Medical Society because, with the possible exception of an association of clergymen, a convention of physicians and surgeons represents the highest interests on this earth. Merchants, financiers, professors, lawyers, law-makers, politicians and statesmen may come and go, and yet touch no subject vital to the interests of every man; but the problems which engage your thoughts are the problems of life and death; and these problems concern every living soul, for it is written that 'all that a man hath will he give for his life.' (Job 11:4.)

"Mr. President, in the hours when cruel pain strikes through these tenements of clay, and man's heart begins to fail him as the sickening fear and horror of the grave comes over his soul; yea, even when he stands within the valley of the shadow of death (Psalms 34:4), he turns to his physician, hoping that through him the benign Creator will answer the petition that the sufferer has made for an exten-

sion of life and a cessation of pain; and because these physicians will be with us in the hour and article of death, when the sands of life shall run low, we welcome you here gladly, so that from your exchange of views you may help perfect medical practice and skill, to the end that each one of you may, like the prophet, Isaiah, be sent many, many times to the bed of the sick and dying with this message from above: 'I have heard thy prayers; I have seen thy tears; behold, I will heal thee.' (II Kings 20:5)."

Dr. Luck: I now have the pleasure of introducing Dr. James H. Lenow, of Little Rock, who will respond to the address of welcome on behalf of the State Medical Society.

ADDRESS OF DR. JAMES H. LENOW.

"Mr. President, Ladies and Gentlemen:

"The Arkansas Medical Society came to Pine Bluff anticipating a display of old-fashioned hospitality, but your generous words of welcome, which have just fallen from the lips of Mayor Toney and Dr. Caruthers, President of the Jefferson County Medical Society, have left us so deeply your debtors that we find it extremely difficult to get fitting words for a response. It is always hard to say how much one appreciates a royal welcome when he really means it. It is no easy task that comes to me officially today. It is with full heart that we attempt to respond, and if our feeble efforts lack the ring of oratory, you must 'read between the lines.'

"The grace of half-fulfilled designs. We have gathered in your hospitable city from all parts of the State of Arkansas—from northwest Arkansas, where the mountains notch the sky in splendid serrations; from the somber swamps of the Mississippi, where the stately oaks are embowered in a jungle of vines; from northeast Arkansas, once the land of the ducks and the water lilies, but now reclaimed and transformed into an agricultural paradise; from the fertile prairie counties, from the hill counties, where diamonds sparkle on the bosom of nature; from the big cities, whose streets are apoplectic with surging throngs; from the quiet rural districts, the physicians of this medical society, the apostles of health, have come to discuss the peculiar problems of our profession that make for the promotion of humanity.

"We felicitate ourselves on having this opportunity to meet in the flourishing city of Pine Bluff. Pine Bluff is not a coming city; it has already got there. It is a panorama of

splendid realities. Just reflect for a moment, that of all this vast territory, extending through many of our Southern States, and known as the 'Great Cotton Belt Region,' Pine Bluff has not only a national reputation as a great cotton market, but its contiguous territory is well known abroad on account of its production of a superior quality and grade, familiar to us as the long-staple cotton. Nor have I told all about you; the county of Jefferson has the proud distinction of having within its borders the largest individual cotton producer in the world. This interest embraces from ten to twelve thousand acres in a high state of cultivation, and under one management. So precious, indeed, is Pine Bluff soil, and its vicinity, that when that greedy monster, the Arkansas River, attempted last fall to swallow a few acres of your real estate, the situation became of national concern, and the mighty arm of our national government was evoked to stop the unholy desecration.

"We congratulate you on having in your midst so many monuments of commercial spirit and thrift. We congratulate you on having your citizenship knitted together by the noble ambition to make Pine Bluff the Queen of the Arkansas River. But, ladies and gentlemen, as humble physicians and surgeons of this great State, we have special reasons to congratulate you on having such a complete and full understanding of all that this medical society represents and stands for.

"Before such an intelligent audience no apology is needed for our claim that the physician is here to work for the betterment of humanity. I can state without fear of successful contradiction that the doctors of this century are held in higher esteem, and that the masses have more confidence in their ability to cure, than in any previous age of history.

"Roosevelt has said, 'Our national health is, physically, our greatest national asset, and to prevent any possible deterioration of the American stock should be a national ambition.'

"Another great thinker has said that the only advantage that the rich man has over the poor man is his ability, in case of sickness, to command the best medical talent.

"To the noble and benevolent ladies of your city, who have labored long and earnestly for the promotion and the final establishment and equipment of that magnificent structure, the Davis Memorial Hospital, as well as our visit-

ing ladies and others who grace this occasion with their presence, I wish to extend a hearty invitation to attend all our sessions. We know that sometimes our discussions are clothed in very technical language; we know the doctor is fond of using exotics, sonorous and sesquipedal words. Our critics tell us that the Latin became a *dead language* when the doctors began to write their prescriptions in it. Nevertheless, we have good reasons for that practice, and if you are fond of scientific terms and technical discussions we shall be glad to have you with us, and we will appreciate the quickening inspiration of your presence.

"And now in conclusion, and in the name of the one thousand members of the Arkansas Medical Society, a representative number of whom are present on this occasion, permit me again to assure you of our appreciation of the unbounded hospitalities extended on every hand. We shall ever remember the felicitous expressions of welcome just spoken by your worthy and representative citizens, and we only hope that our ability to enjoy may be commensurate with our desire to partake of your gracious courtesies."

Dr. Luck: Ladies and gentlemen, I take great pleasure in introducing Dr. Joseph T. Clegg, of Siloam Springs, president of the Arkansas Medical Society.

(See address on first page.)

Dr. F. B. Young moved that a committee be appointed to receive and report on the president's address to the House of Delegates on Friday morning. Seconded by Dr. Kosminsky. Carried.

The chair appointed Dr. J. G. Eberle, of Fort Smith; Dr. Adam Guthrie, of Prescott, and Dr. W. S. Stewart.

The Chair: Ladies and gentlemen of the Arkansas Medical Society, it is with great pleasure that I introduce to you and extend the courtesies of the floor to our distinguished guest, Dr. D. S. Warren, Passed Assistant Surgeon, United States Public Health and Hospital Service.

Dr. Warren: Mr. President, ladies and gentlemen of the Arkansas Medical Society, in behalf of the Surgeon General, whose personal representative I am, and in my own behalf, I want to thank you for the courtesy just extended.

Dr. Morgan Smith, in the absence of the chairman of the Committee on Arrangements, made announcement of social features, as follows:

This afternoon at 2:30, an auto ride for the visiting ladies. Assemble at the Jefferson Hotel.

There will be a reception to the members, delegates and visitors by Dr. and Mrs. A. C. Jordan, at their residence, 1519 Cherry Street, from 8:00 to 10:00 p. m.

Adjourned.

House of Delegates.

WEDNESDAY MORNING, MAY 19, 1909.

House of Delegates convened at 10:45 a. m., President Clegg in the chair.

Dr. H. Thibault, of Scott, offered the following resolution:

“Resolved, That unless the Journal of the Arkansas Medical Society can be run as a clean, ethical journal, that its publication by the society be discontinued.”

Dr. Thibault: I wish to say, as a basis for that resolution, that it is offered without any thought of censure. Last year, on the last day of the session, probably the last motion that came up before the meeting adjourned was in regard to acceptance of advertisements for the Journal of the Arkansas Medical Society, and it was moved that the matter be left to the discretion of the secretary. An amendment was adopted that no advertisement of a drug be taken except those which had been approved by the Council on Pharmacy and Chemistry of the American Medical Association. The secretary asked the question, what was he to do about drugs which have not been passed upon by the Council on Pharmacy and Chemistry, and it was voted that they should not be put in before the Council on Pharmacy and Chemistry had reported on them and had approved them. Notwithstanding this fact, if you examine the advertising pages of the Journal you will find that we have four such advertisements carried therein—four distinct proprietary drugs which have never been approved by the Council on Pharmacy and Chemistry. One of these drugs that has been refused all over the country by every respectable medical paper in the land is Glyco-Thymoline, which less than a year ago was censured by the Journal of the American Medical Association, has been refused by the Texas State Medical Journal because it was irregular. It was published once in the columns of the Southern Medical Journal, but the editor made a profuse apology to the medical profession for the fact that it had *slipped in*, owing to lack of vigilance. The Southern Medical Journal made the most abject apology to the medical profession of the South because of the fact that they had allowed it to slip into one issue. Now, a medical journal, if it ever expects to amount to anything, must keep its

pages clean and true, and to do this it must clean up its advertisements, such as Glyco-Thymoline. Now, as to what kind of pull Kress & Owen have with us, I do not know; but the Journal published a reading notice on the editorial page not long ago, and the Lonoake County Medical Society protested against it at the time; but the Journal never did publish the protest, and since then they have carried a page advertisement every month in the face of the fact that this House of Delegates last year positively instructed the secretary not to take any advertisements of drugs which were not approved by the Council of Pharmacy and Chemistry. It does not end there. We have the eminent, high-priced quack remedy, ‘Sal Hepatica, carried right alongside of everything else. Sal Hepatica is a saline aperient, composed of epsom salts, sulphate of soda, and some kind of effervescent powder; no very great mystery about it. But then, what is the use of taking epsom salts at three cents per pound, when you can get Sal Hepatica and pay twenty-eight cents a pound for it? We should withdraw the advertisements of drugs and drug houses which have not been formally approved by the Committee on Pharmacy and Chemistry. It is not a discourtesy to ask them to wait. They should not feel put out about being refused before it is passed upon. If it is accepted by the Journal of the American Medical Association, it will appear in our Journal; that is all. It is not for the purpose of hampering them. It does not prove that it is not a great remedy. Some of these gentlemen tell us in one of these little advertisements that it is all the doctor needs; this is all that he should carry around with him. What cares he about the duration of a postpartum hemorrhage, a shoulder presentation, or a man with his leg cut off? He just carries a bottle of the remedy in his pocket and he is equipped for the occasion!

It is a fact that it has always been considered indecent for a medical journal to carry an advertisement within the boundary of its first three pages and the last page; but we have advertisements of farms for sale, practice for sale, and all that sort of stuff in our editorial pages. These advertisements are ethical, and are all right in classified columns, either in a medical journal or in a newspaper, but they do not usually appear in the editorial or scientific section. We read with great interest a case of hemolysis, and run right into the fact that Dr. So-and-So has a \$2,000.00-a-year practice that he would like to get five thousand dollars for, or something like that! We have

Parke, Davis & Co.'s advertisement of hypodermic tablets on the bottom of page 332, of the last issue of the Journal, Vol. 5, No. 12, on the last page of reading matter, under the head of obituary notices of Dr. William S. Lindsey, Dr. Louis R. Stark and Dr. John Hutchin Gaines. These are all mixed up, without change of heading, with this advertisement of Parke, Davis & Co.'s hypodermic tablets.

The Chair: Gentlemen, refer to section 3, chapter 7, of the by-laws, which says, "All questions of an ethical nature brought before the House of Delegates in general session shall be referred to the council without discussion." This matter is referred to the council without further discussion.

The secretary, Dr. Smith, reminded Dr. Thibault that the council had unqualifiedly indorsed his conduct of the Journal, and he did not have to answer to him for his acts as editor. He referred to the many vexations to which he had been subjected, and decried the attitude taken by his critics. The advertisements referred to had been approved by every previous council, and had been run in the Journal for a number of years, during the editorship of Dr. Stephenson. If the council desired to open the matter he would be pleased to make such explanations as they desired.

Dr. Wallis: Personal references are out of order.

Dr. Shibley: That resolution should have been read before the council.

The Chair: The gentleman may state his reasons for offering the resolution, which he has done. The secretary may take it up with the council. The matter is referred to the council without further discussion.

Dr. Eberle: Leaving out the question of personal privilege, the question of criticism in the premises, which I think properly goes to the council without debate, would not a resolution for the discontinuance of the Journal come before the House of Delegates?

The Chair: The resolution refers simply to the management. If it were a question for discontinuance, with no reference to the ethical side of the matter, it would be debatable; but the gentleman has urged his complaint as a basis for introducing the resolution. That is all.

Dr. Eberle: I would like to make the point when the resolution was read, whatever remarks were made in introducing it were simply his individual remarks, and do not affect the issue.

The Chair: The resolution is not at the end of a preamble. That being the case, the resolution brings out an ethical question, and it is referred to the council without discussion. Now, the resolution was read without preamble, and it was based upon the ethical conduct of the Journal.

Dr. Eberle: I would like to have it read once more.

Resolution is read second time.

Dr. Eberle: I have nothing further to add.
Adjourned.

General Session.

THURSDAY MORNING, MAY 20, 1909.

Called to order at 9:30 a. m. Dr. B. D. Luck in the chair.

There being no unfinished business nor any new business to come before the general session, Dr. Runyan moved that the courtesies of the floor be extended to the visiting guests. Motion prevailed.

The Chair: We have with us Dr. James H. Reagan, of Ruston, La. He is here as the fraternal delegate from our sister State. We shall be glad to extend to him the courtesies of the floor.

Dr. Reagan: I am not prepared to make you a speech, but I want to say just a word or two. I appreciate very much the honor of being the fraternal delegate from my State to your State. We have no object in medical organization that is bound up by State lines. I just attended a very excellent meeting in our State, the session of the Louisiana State Medical Society. I met a great many of our very best men there—men I have known before. I find that you are the same kind of men in every way. We have the same objects in view and the same natures. I believe that societies should send delegates from one to the other to get better acquainted; because, as I say, we have no object that is limited by State boundaries.

The Chair: I see Dr. Jelks, of Memphis, is here this morning. I take pleasure in extending to him the courtesies of the floor.

Dr. Jelks: I thank you very much, and am delighted to be with you.

The Chair: Dr. Pettey, of Memphis, is also here. We would like to hear from him.

Dr. Pettey: I appreciate very much your courtesies. I think that the time will be better spent by taking up the regular program. I lived in this State a number of years, and I feel very much at home here today among my old friends.

The Secretary read greetings from the Arkansas Sketch Book, the Little Rock Board of Trade, the Business Men's League and many citizens of Little Rock, all expressing the wish that the Arkansas Medical Society hold its next meeting at Little Rock.

Dr. Wood: While we are on the matter of invitations for the next meeting of the State society, I wish to say that I am authorized by the Washington County Medical Society and the citizens of Fayetteville to express to this society the wish that they meet with us at Fayetteville next year.

Dr. Kosminsky: I would like to extend to the members of the Arkansas Medical Society an invitation from the Miller County Medical Society, also from the members and citizens of Miller County, to hold its meeting at Texarkana next year.

Dr. Meriwether: I have been authorized by Dr. Stephenson to offer his resignation as delegate to the American Medical Association this year. The state of his health necessitates his going away, and he will not be able to attend the meeting. Dr. Warren attended last year as alternate, and was the only representative we had at the Chicago meeting. If Dr. Warren is willing to go back again this year, I would suggest that we send him. I think it would be a very nice compliment to Dr. Warren to make him a delegate to fill out the unexpired term of Dr. Stephenson, resigned. I make this as a motion that he be made delegate.

Chair ruled the motion out of order. Should be referred to the House of Delegates.

On motion of Dr. Guthrie, the secretary was instructed to send to the Missouri Medical Society, the Illinois State Medical Association, the Nebraska Medical Association and the Indiana State Medical Association, now in session, telegrams of congratulations and greetings and best wishes for a successful meeting.

On motion of Dr. Breathwith, the Arizona State Medical Society was added to the list.

The Chair: I will ask the secretary to see that the telegrams are sent as directed by the motion.

The secretary called attention to the necessity of members and visitors depositing their certificates with him for validation by railroad agent to secure reduced fare returning to their homes.

Dr. Crutcher made announcement of social features in behalf of the Committee on Arrangements, emphasizing especially a reception at Davis Hospital.

Adjourned.

House of Delegates.

FRIDAY, MAY 21.

The House of Delegates was called to order at 9:30 a. m., there being a quorum present, with President Clegg presiding.

Secretary: There are a number of counties whose regular delegates are not present.

President: It is not with the House of Delegates, but with the councilors, to pass upon those who are legally qualified delegates. We will offer all these questions to the council to be acted on at once.

Dr. Meriwether: Moved that the counties not represented by regular delegates be filled by some member of their society. This is the report from the council. Adopted.

Dr. Barry: Moved that we suspend the rules and proceed to act upon the resignation of Dr. Stephenson as delegate to the American Medical Association. Motion adopted.

Dr. Meriwether: I was instructed by Dr. Stephenson that if Dr. Warren did not wish to attend the meeting of the American Medical Association this year, to offer his resignation, and if Dr. Warren did wish to attend, not to offer his resignation.

Dr. Barry: What has Dr. Warren to do with it?

Dr. Meriwether: I am ready to act upon Dr. Warren's desires.

Dr. Barry: I move that we accept the resignation of Dr. Stephenson. Seconded.

Dr. Guthrie: That motion is out of order. Dr. Stephenson has not offered his resignation. He has seen fit, through the advice of his friends and otherwise, to not render his resignation.

President: The point is well taken. We will hear from Dr. Warren.

Dr. Warren: I received a letter from Dr. Stephenson. I represented the society last year as alternate, because Dr. Stephenson could not go, and this year his health was so bad he wrote me, wanting to know if I would go again. If I would, he would let the matter stand, and if I could not, he would resign and allow somebody else to be appointed at this meeting. I feel like if he could not go, and knew it before the meeting, that it would be all right for him to resign and let the society select whom they chose, or whom they wished to represent them. Of course, I was elected last year for two years as an alternate. If they want somebody else, I do not care to stand in their way. There-

fore, I do not care to prevent the resignation of Dr. Stephenson.

Dr. Guthrie: Is there any reason why you cannot go in the regular way if elected?

Dr. Warren: No, I don't know that there is.

Dr. Meriwether: Dr. Stephenson felt, as he was the regular delegate last year, and as Dr. Warren made sacrifices to go, that he was due some consideration from this society, and it was for that reason that he asked me to make this resignation conditionally. Now, I understand that the nominating committee has nominated two men as delegates, when there was only one vacancy existing. Now, it is entirely with this society, who heard my statement of it, as to what they will do.

President: You presented Dr. Stephenson's resignation?

Dr. Meriwether: Conditionally.

President: It is now up to you to withdraw it.

Dr. Meriwether: I leave it entirely to Dr. Warren.

Dr. Warren: I have left it to the society.

Dr. Guthrie: He is willing to go again. He does not want to say, "I want to go." There is not a man in this house who would get up and say he wanted to go, even if a regularly elected officer. The other man, the regularly elected delegate, has not tendered his resignation.

Dr. Meriwether: I withdraw the resignation of Dr. Stephenson.

The report of the nominating committee was read, it being in the regular order of business.

REPORT OF NOMINATING COMMITTEE.

Pine Bluff, Ark., May 21, 1909.

We, members of the Nominating Committee of the thirty-third annual meeting of the Arkansas Medical Society, submit the following report to the House of Delegates:

President—George S. Brown, Conway; J. H. Lenow, Little Rock; J. R. Dale, Texarkana.

First Vice President—H. D. Wood, Fayetteville.

Second Vice President—E. L. Watson, Newport.

Third Vice President—F. A. Corn, Lonoke.

Treasurer—J. S. Wood, Hot Springs.

Secretary—Morgan Smith, Little Rock.

Delegate to American Medical Association—E. C. Hay, Hot Springs.

Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.

Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.

Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.

Pathology—J. R. Dibrell, Little Rock, chairman; S. B. Kirby, Harrison, secretary.

State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.

Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.

Dermatology and Syphilology—G. A. Herbert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILORS.

First District—H. R. McCarroll, Walnut Ridge.

Third District—S. H. Southall, Lonoke.

Fifth District—H. H. Niehuss, Wesson.

Seventh District—J. C. Wallis, Arkadelphia.

Ninth District—C. T. Cannaday, Cotter.

STATE BOARD.

Second District—F. T. Murphy, Brinkley; L. E. Willis, Newport; G. A. Warren, Black Rock.

Third District—F. B. Young, Springdale; B. F. Kirby, Harrison; J. H. Beard, Gentry.

Sixth District—W. S. Stewart, Pine Bluff; J. L. Butler, Sheridan; L. H. Barry.

Seventh District—J. C. Wallis, Arkadelphia; J. T. Henry, Eagle Mills; J. A. Moore, Lisbon.

The election of president being first in order, on the first ballot Dr. Brown received nineteen votes, Dr. Lenow twenty votes, and Dr. Dale eight votes.

On the second ballot Dr. Brown received twenty votes, Dr. Lenow twenty-six votes, and Dr. Dale three votes.

Dr. Lenow, receiving a majority of all votes cast, was declared elected as president of the society for the ensuing year, and Dr. Brown and Dr. Dale were appointed as a committee to escort the president-elect to the chair when the general session held its last meeting.

Dr. Hay: Since there is no opposition, I move that the remaining officers be elected by acclamation.

Motion adopted.

The following resolution was adopted:

Resolved, The nominating committee recommend that the House of Delegates select two delegates to represent the Arkansas Medical Society at the Pharmacopeia Convention at Washington, D. C., the second Tuesday in May, 1910. Also selects the place of next meeting.

(Signed)

C. W. DIXON,
Secretary.

Dr. Barry: I move that the appointment of the delegate be left to the president. As I understand, those delegates should be graduated pharmacists. I know I am not, and you might elect some one who is not a graduated pharmacist.

Seconded.

Dr. Thibault: As a matter of convenience, it will be necessary for the secretary to notify the convention of their selection; also, furnish these delegates with credentials at least two or three months before the meeting of that convention, which will probably take place before our next meeting.

Dr. Barry: I mean the incoming president.
Motion adopted.

President: The next order of business is the selection of a place for the next meeting.

Dr. Meriwether: There is a gentleman here who wishes to make a few remarks.

Mr. E. C. Taylor, of Little Rock: Mr. Chairman and gentlemen, I want to thank you for this opportunity to invite you to hold your next convention in Little Rock. I have been told that you have been notified by wire that you hold your next convention there, and I want to invite you as a representative of the management of the Hotel Marion. As some of you may be aware, when the Hotel Marion was first built we built a convention or banquet hall to hold meetings of this kind in. The hall has grown so small, or the business has grown so large, that we are unable to accommodate the conventions that come to Little Rock, in that hall, and we are also unable to furnish hotel accommodations to the people that come to Little Rock. I want to state that the hotel company has already let a contract to build an annex, and they are excavating, and I am sure before your next annual convention that this will be completed, which will give us one hundred and thirty more rooms, with a seating capacity of 1,000 in the convention hall, without a pillar or post, with committee rooms in con-

nection, just across the alley at the rear of the present hotel. I further want to state, while I am not authorized to state what Little Rock will do, that there has been great interest manifested in this matter. We have three commercial organizations there—we used to have one—and there has been a committee appointed from each one of those organizations to solicit funds to take care of conventions that may be brought to Little Rock in 1910. There is a committee from each one of those organizations to look after that fund. And, judging the future from the past, I assure you that if you leave it to us you will be royally entertained. I thank you.

Secretary: I want to state that I have telegrams from the Business Men's League, of which Mr. Auten is president, from the Board of Trade, of which Mr. H. L. Remmel is president and George R. Brown, secretary, and from private citizens, to hold our next convention at Little Rock.

Dr. Kosminsky: I wish to invite the members of the Arkansas Medical Society to the city of Texarkana, Ark. We have no telegrams, we have no special committees, other than the brother physicians, who invite you to come and meet with us. We need you and we want you, and we will give you a royal and hearty welcome, should you decide to come with us.

Dr. Wood: I was asked by the physicians of Fayetteville to invite the medical society to our little city among the hills. We will not give you a hall that will seat 1,000; we will give you a place that will seat as many as will be likely to come, and will be glad to have you with us. We had the society with us nine years ago, on very short notice. Jonesboro had invited the society there, and a doctor or somebody in that community created an epidemic of smallpox, and we saw we were going to fail to have a meeting that year, and we invited them to come to Fayetteville. There are two things I can promise you that will not interrupt the proceedings of the meetings if you come to Fayetteville; that is, street cars and saloons.

Dr. Burns: The smallpox was brought to Jonesboro from Fayetteville.

Dr. Kosminsky: We have from Texarkana, also, a member of our society, Dr. Mann. I would like to give him an opportunity to speak.

Dr. Mann: I just wish to say that we would be very much pleased indeed to have you come to Texarkana. We have no fine hotel as the Marion, but we do need you to come

down to Texarkana and do some missionary work in our end of the State. We would be most pleased indeed to have you come there. We will give you a royal reception if you come to Texarkana.

Dr. Eberle: I want to say that Little Rock, Texarkana and Fayetteville are all delightful towns that will entertain us well, and would like to second the motion for all three. I just want to say that we will be in the field next year, and when you come to the next meeting, come with your minds made up that Fort Smith wants you in 1911, and that we will entertain you as royally as the other gentlemen said, and that our sweethearts and daughters and wives will welcome you. I might say with open arms, but we will watch them! In 1911 we will have a hotel that can accommodate you. So, remember Fort Smith in 1911.

A ballot being had, Little Rock received thirty votes, Texarkana thirteen votes and Fayetteville four votes. Therefore, Little Rock was declared as the next meeting place.

The next order of business was the report of the chairman of the council.

REPORT OF COUNCIL.

To the President and Members of the House of Delegates:

In accordance with the constitution of the Arkansas Medical Society, I beg leave to submit my report based upon those filed with me by the various councilors throughout the State.

There is now thorough harmony among the component societies; everything indicates an increased interest in organized medicine.

I submit reports from the Second, Third, Fourth, Fifth, Seventh, Eighth and Tenth Districts. There has been good attendance at meetings and a greater number of papers presented and discussed before the county societies. The character of the papers prepared indicates there is a general and growing increase of interest in matters medical.

A number of counties in the State have adopted postgraduate courses. We are glad to say it has been of incalculable benefit to those societies which have indorsed this feature and put it into practice.

There are sixty-one organized counties in the State.

We believe that the detail of work on the part of councilors in their respective districts would result in the organization of at least five or six more component societies.

Reports received from the various county societies show total enrollment of about 945.

We would recommend to the new councilor of the Fifth District that Dallas County be brought back into the fold of organized medicine, and every effort should be made to accomplish this result. There are a number of capable and competent physicians in that territory, and this county should no longer go without organized representation.

Your council especially desires to recommend to the House of Delegates that it pass a resolution fixing a fiscal date and a uniform time for the election of county officers. I would suggest December 31 for the close of fiscal year, and the first Tuesday in December for the election of county officers. Under our present system of waiting until about the last day for election of officers and close of fiscal year results in many delinquencies being shown. It is recommended that the election of officers take place the first Tuesday in December and the annual assessment be taken at the same time.

We would recommend that the secretary be voted an honorarium of six hundred dollars for services during the past year, and that all books submitted to him for review and on hand at the present time be donated to him as an expression of appreciation of his patient labors, and that he be voted an allowance of fifty dollars, or so much of that sum as may be necessary during the coming year, for competent stenographic assistance and such other clerical help as may be deemed necessary and expedient.

At the recommendation and suggestion of the secretary, it has been deemed wise to separate the offices of secretary and editor of the Journal. It being deemed necessary for the best interest of the society to relieve the secretary of the excessive burden of labor necessary to the conduct of the Journal, and we would recommend that Dr. C. P. Meriwether be elected as editor of the Journal for the ensuing year.

We would recommend that the president, treasurer and secretary be authorized a committee of three and empowered to select a suitable button bearing the emblem of the society, which, in their judgment, is feasible and practicable, to be adopted as the official button of the society, and that it be offered for sale to members, the revenue derived from this source to be devoted to the work of carrying on the work of the society, as may appear practicable and necessary.

Your council recommends the continuance of the publication of the Journal, and with the suggestion that scrupulous care be exercised in the acceptance of advertisements and that no objectionable matter be allowed to appear in its pages.

Dr. F. B. Young, councilor of the Tenth District, states in his opinion, to be enabled to carry on the active good work of the society in the counties comprising his district, it will be necessary to admit the undergraduates to full membership. He has reached this conclusion after careful investigation of the conditions existing. He was formerly diametrically opposed to any such procedure, but is now convinced that the best interest of organized medicine would be conserved by this step. After visiting and corresponding with the various county societies, he is able to report increased interest in all things pertaining to medical welfare, and excellent work is being done and gratifying results everywhere evident.

Dr. F. B. Young introduced a resolution which is recommended for your earnest consideration. He deems it detrimental to the best interests of the society to have two medical colleges in operation at the same time, and desires that a committee be appointed to devise ways and means whereby the consolidation of the two colleges may be affected, that the best interests of the medical profession of Arkansas be conserved. He desires that a committee of ten members of this society, one from each councilor district, to devise some scheme or plan of combination of interests looking to the consolidation of the two schools and report at next session of this society.

Auditing committee reports having examined the books of the secretary, with his assistance, and finds them in good shape and balance accurately.

Respectfully submitted,

J. C. WALLIS, *Chairman*,

WILLIAM BREATHWIT, *Sec'y*.

The following resolutions introduced by the council were read:

AMENDMENT NO. 1.

Whereas, It is well to carefully guard the interests of this society; therefore, be it

Resolved, That the words, "the secretary shall give bond in the sum of \$1,000.00," be added in the beginning of section 4 of chapter 5 of the by-laws; and, further, be it

Resolved, That section 5 be added to chapter 5 as follows:

"Sec. 5. The council shall have authority to accept or reject all bonds."

AMENDMENT NO. 2.

Whereas, Injustice may be done some county societies by the failure of their delegate or alternate to attend the State meeting; therefore, be it

Resolved, That the following addition be made to chapter 7:

"Sec. 6. In case of a vacancy in the office of delegate, the council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office."

AMENDMENT NO. 3.

Dr. Young introduced the following as recommended by the council:

Whereas, It seems that the cause of medical organization can be forwarded thereby, therefore, be it

Resolved, That the words "who is a graduate of a reputable medical college" be struck from section 5 of chapter 9 of the by-laws.

President: Without objection, the report of the council will be adopted, and the resolutions will come up at the next session of the society.

"Resolved, That inasmuch as Dr. C. C. Stephenson, delegate from the Arkansas Medical Society to the American Medical Association, and an ex-president and ex-secretary of the Arkansas Medical Society, will be in Seattle, Wash., during the meetings of the Washington, Idaho, Oregon and British Columbia medical societies, which meet in the city of Seattle, July, 1909, the Arkansas Medical Society takes the liberty of appointing Dr. Stephenson as fraternal delegate to these societies, and through him sends the State medical societies aforesaid named the greetings of the Arkansas Medical Society, and our best wishes for not only a successful meeting, but for the greatest in the history of their associations.

"Resolved, That our secretary be instructed, and he is hereby directed, to notify the respective secretaries of this appointment."

Adopted by rising vote.

Dr. Barry: Under the head of unfinished business, I wish to introduce a resolution:

"Be It Resolved, That the society shall elect a delegate to the Louisiana State Medical Society."

I wish to state in behalf of this resolution that Louisiana has kindly elected a delegate to our society. I think it is nothing but right that we should return the compliment.

Seconded.

Dr. Webtser: I offer as an amendment that we also include Texas.

Dr. Barry: I accept that amendment.

Motion adopted as amended.

Dr. Warren: I believe it is in order for the committee of last year to make a report, the committee that was appointed to get a standard of admission for applicants to the medical schools. As chairman of that committee, I received a notice of my appointment late after the schools had opened up, and did not take action that would affect last year's session. We did not call a meeting, thinking that we could get together and make our report at this meeting. The Southern Association of Medical Colleges has already adopted a standard of admission, which will be in force in 1910-1911, one year from now; that standard being identical with the standard that we had recommended, and being only one year from the coming year, and also other sister colleges over the South not adopting it until that time, the committee thought it would be wise to let the matter alone and let the standard be adopted by the colleges one year from now that is laid out by the Southern Association of Medical Colleges, which, as I say, is identical with the standard that we recommend. That's the only report we have.

The next order of business was the report of the Committee on Medical Legislation and Public Policy.

REPORT OF COMMITTEE ON MEDICAL LEGISLATION AND PUBLIC POLICY.

To the House of Delegates, Arkansas Medical Society:

Gentlemen—In the absence of Dr. St. Cloud Cooper, chairman of this committee, I have been requested to make report for the committee, and beg leave to submit the following:

The first meeting of this committee was held at Little Rock in January, 1909, all members being present, except Dr. Cooper, who was detained at his home on account of sickness.

The more important matters pertaining to public health and medical education in this State were thoroughly discussed, and the unanimous agreement was reached that our

efforts should be confined to the passage of the following measures:

A bill to reorganize the State Board of Health, with a provision for an appropriation of sufficient funds to carry out the aims and purposes of the bill; bill to convert the State House into a charity hospital; bureau of vital statistics, to be modeled after the plan outlined by the United States public hospitals and Marine Hospital Service; amending medical practice act of 1903.

Your committee held several meetings during the session of the legislature and finally succeeded in securing the passage of the measure known as the "Turner Bill" through both houses. It was signed by the governor on May 6. This bill is printed in full in the May number of the Journal of the Arkansas Medical Society, to which attention is called.

It is scarcely necessary here to relate that in our opinion it places Arkansas in line with the more progressive States in the Union, and we congratulate ourselves that in the future only men of genuine medical ability will be allowed to come to our medical examination boards.

We desire to call attention to some special features of this law, such as the power to revoke a license for chronic, persistent inebriety; practice of criminal abortion, either as principal or abettor; conviction of crimes involving moral turpitude; publicly advertising special ability in the cure of chronic and incurable diseases. Heretofore it has been possible under the law for any applicant to choose examination before the medical board which he deemed most favorable to his interests. Under the present law he can only go before the board which represents the school of medicine from which he graduated. The lax application of this requirement has been the subject of much criticism in the past.

Reciprocity is another very good feature of this law. Provision is made for reciprocity in licensure with our other States that have similar requirements and standards that we have now.

The matter of passing the State sanatorium bill providing means for the treatment of tuberculosis was left entirely in the hands of the Arkansas Association for the Relief and Control of Tuberculosis, and, in conjunction with your committee, our combined effort was directed to the passage of the "Oldham Bill." We are gratified to announce its passage on the last day of the session, and we have every reason to believe that the governor will sign

it in due course of time, and it will become operative in a short time.

This provides for the building of a State sanatorium at a cost of \$40,000.00 and the appropriation of \$10,000.00 per annum for its maintenance. Your committee acknowledges its indebtedness to His Excellency Governor George W. Donaghey, Judge Hill, the profession, citizens and others who contributed so efficiently in bringing about this gratifying result.

It was the desire of your committee to have passed at this session of the legislature a bill for the collection of vital statistics, but it was deemed inexpedient to burden the legislature with too many bills until we could provide for the medical practice laws governing the examination of candidates and the State sanatorium for the tuberculosis patients. The State board and sanatorium bills were not reached until near the end of the session, the latter on the last day, and it was impossible to do any more in the limited time, and it was not deemed wise to introduce any further bills for action at this session. If the bills which were passed had been introduced and disposed of earlier in the session, we believe it would have been entirely feasible to secure legislation covering vital statistics and the charity hospital. The legislature was disposed to treat us kindly and seemed willing to do everything in their power to promote the welfare of the commonwealth along sanitary and hygienic lines.

After mature deliberation and being fully advised as possible, taking all the conditions into consideration, it was agreed that all our energies be concentrated on the law to amend the medical practice act of 1903, in the following particulars:

Require applicants for licensure to exhibit satisfactory evidence of graduation from a reputable medical school; to change the number of meetings of the examining board from four to two, to be held in May and October; raise the fee for examination from ten dollars to fifteen dollars; increase the number of branches in which the candidate was to be examined to include histology, hygiene, pathology, bacteriology, ophthalmology, otology and gynecology; to require the secretaries of the examining boards to keep all examination papers of applicants for one year, same to be open for inspection for cause; to provide for reciprocity with other States having like re-

quirements as ours, the reciprocity fee to be \$25.00.

A LAW TO PROVIDE FOR THE ERECTION OF A STATE SANATORIUM FOR TUBERCULOSIS PATIENTS.

It was agreed to defer effort in behalf of converting the old State House into a charity hospital, as it was the sense of the committee that an amendment to the medical practice law was paramount, being of far greater importance to the profession and the public. Therefore, the secretary was instructed to have a bill drawn covering the essential features as above outlined, and it was committed to the care of Senator Arthur Turner, of Jonesboro, who was selected to champion the bill and work for its passage.

It was deemed expedient that a measure looking to the establishment of a bureau of vital statistics should be pressed for passage at the next term of the legislature, and combined efforts of ourselves and friends be directed to a passage for the relief of tuberculosis sufferers in Arkansas; that the coöperation of the Association for the Relief and Control of Tuberculosis would no doubt be effective at that time; that a bureau of statistics and State Board of Health would be practically inoperative without sufficient funds to enable the collection of sufficient data. On account of the incomplete state of the new capitol building, and that it will probably be several years before the old capitol will be available for a sanatorium, it was decided not to bring it forward for action at this session. Your committee firmly believes there will be little difficulty in bringing about the needed legislation at the proper time, the temper of the legislature which has just closed being exceedingly friendly to our interests, and we feel confident they will be ready to coöperate in anything that the Arkansas Medical Society may see fit to suggest, or that bears its indorsement.

Your committee wishes to express its thanks for the hearty coöperation and assistance rendered by the many citizens throughout the State, doctors in and out of the society, and county societies as a whole, who, by telegrams, letters and memorials and personal effort and persuasion, greatly assisted your committee in the prosecution of its work.

We are especially indebted to Senator Turner and Representative Spillers for their splendid working ability, diplomatic effort

and readiness and willingness at all times to assist your committee. This completes the labors of your committee.

Respectfully submitted,

ST. CLOUD COOPER, *Chairman,*

J. T. CLEGG,

GEORGE S. BROWN.

J. T. HENRY,

MORGAN SMITH.

President: If there is no objection, the report will be accepted.

Dr. Luck here took the chair.

Dr. Eberle: If I am in order, I would like to submit the report of the Committee on President's Address.

To the House of Delegates of the Arkansas Medical Society:

We, your appointed Committee on the President's Address, beg leave to report that we have gone over the address very carefully and heartily indorse it as a whole, and commend it to the careful consideration of the membership. We congratulate the society that recent medical legislation has been enacted that meets many of the suggestions made in this report, and we urge the members of this society to bring before our next law-making body the other suggestions embodied in this report.

J. G. EBERLE,
ADAM GUTHRIE,
W. S. STEWART,
Committee.

Dr. Barry: Moved that it be accepted.
Motion adopted.

Dr. Shibley: I do not wish the Committee on Legislation to be passed by with faint applause. I move a vote of thanks be given to that committee for their earnest work, because they were very earnest workers on the tuberculosis bill, and I do not believe we would have been able to pass that bill if it had not been for that committee, especially Dr. Smith.

Unanimously carried by a rising vote.

Dr. Eberle: I suppose Dr. Shibley has been thanked so much that it has begun to be tiresome. He is thanked every year. I move that a rising vote of thanks be given him for the efficient work he has done in behalf of the movement for the prevention and cure of tuberculosis in the State of Arkansas.

Adopted by a rising vote.

Dr. Shibley: Gentlemen, I am gratified to know that you have appreciated my efforts.

Dr. Young: I move that a vote of thanks be extended to Dr. Reagan, representative of the Louisiana State Medical Society, and to the Louisiana State Medical Society, for coming here as a fraternal delegate.

Adopted.

Dr. Young introduced the following resolutions, which were adopted by a rising vote:

"*Resolved,* That we express our gratitude and thanks to our host, the Jefferson County Medical Society, and the citizens of Pine Bluff, the daily press, the Jefferson Hotel, for uniform courtesies and hospitality, and the Y. M. C. A. for the use of its hall for four meetings, and to the railroads of the State for reduced rates of fare during our session.

"*Resolved,* That we express to our retiring president, Dr. J. T. Clegg, of Siloam Springs, who has presided over the deliberations of this body, our appreciation of the signal ability and uniform courtesy and fairness which have characterized his administration throughout the year, and the sterling service rendered organized medicine, which he has so cheerfully rendered.

"*Resolved,* That our thanks are due to Dr. Walter Wyman, of the United States Public Health and Marine Hospital Service, of Washington, D. C., for his coöperation and assistance in sending to this meeting Dr. S. J. Warren, of St. Louis, passed assistant surgeon; that we heartily appreciate this courtesy and express our gratitude for the wise counsel, intelligent instruction, helpful advice and excellent service which Dr. Warren has so cheerfully rendered to this society, and through it the public."

The secretary read the following communication from the Arkansas Association of Pharmacists:

To the President and Members of the Arkansas State Medical Society:

Gentlemen—The undersigned committee from the Arkansas Association of Pharmacists is charged with the very pleasant duty of extending the best wishes and congratulations of our association to this distinguished body. During the week just passed we have concluded one of the most interesting and profitable meetings in the history of our association, and we bespeak for your convention, now in session, an even greater measure of success and accord.

Our association congratulates you on the position your society holds in American medicine. Many of your members have attained more than local renown, and the papers read

before you, from time to time, elicit favorable notice and comment throughout the length and breadth of this country of ours. We know of no other State in the Union where the relations between the physician and pharmacist are more cordial and mutually helpful than in Arkansas. May this ideal condition be perpetuated and strengthened. We earnestly invite you to command us in anything in which we may assist you in your most noble calling.

In the name of our association we thank you for many past courtesies and for this opportunity of extending our most hearty felicitations.

Yours very truly and fraternally,
W. T. BRASHER,
A. G. BEDELL,
ANDREW PARSE, *Secretary*.

Dr. Runyan offered the following resolution, which was adopted:

Whereas, The Arkansas Association of Pharmacists has extended to the society its fraternal greeting and best wishes for a successful meeting; therefore, be it

Resolved, That we heartily appreciate such manifestation of their courtesy and good will, and desire to return to them our most cordial felicitations.

Dr. Barry: As there has been no elected delegate to the Louisiana or Texas State Medical Society, I move that the incoming president appoint those delegates.

Motion adopted.

Secretary: And any other States that it might be found necessary.

Adopted.

On motion, the House of Delegates adjourned *sine die*.

General Session.

FRIDAY AFTERNOON, MAY 21, 1909.

Called to order 2 p. m., President Clegg in the chair.

Chairman: I will appoint Dr. James Dibrell, of Little Rock, and Dr. Wood, of Fayetteville, a committee to escort the president-elect, Dr. Lenow, to the chair.

Chairman:

Members of the Arkansas Medical Society, Ladies and Gentlemen:

It is one of my greatest pleasures to introduce to you on this occasion my old-time friend, Dr. Lenow, as your president for the ensuing year.

Dr. Lenow:

Gentlemen of the Arkansas Medical Society:

I desire to thank you for the distinguished honor you have conferred upon me today. I am frank to confess that I feel a natural pride in thus becoming the recipient of the highest honor in the gift of this society, and I assure you none higher or more appreciated could be bestowed upon me.

The Arkansas Medical Society, since its reorganization in 1903, has kept pace with similar medical organizations of other States, and our society has contributed its share toward the perfection and efficiency of our national organization. To maintain the high standard set for us by other State societies and now so honorably held by our own society to its great credit; to promote every purpose for which medical organizations stand; to promote harmony amongst our members and to further the interests, collectively and individually, of the members of the society, shall be my constant aim and endeavor, and to accomplish these ends I humbly crave your earnest coöperation and undivided support.

Since the organization of this society in 1875, of which I am proud to claim charter membership, I have never allowed my interest in organized medicine to flag, and now, that you have placed me in a position of great trust and honor, I shall exert every effort to meet the extraordinary requirements carried by the position, as president of no section or clique, but of the one thousand members of the Arkansas Medical Society, scattered over sixty-one counties. Let me ask you to coöperate with me in raising our ideals and maintaining our character as men and physicians. Let us have unity of purpose, harmony of action and the spirit of concord dictating our every movement.

Now, in regard to the resolution that was passed by the council this morning, ten members shall be appointed from this body with the view of getting the two medical colleges in Little Rock consolidated. I don't believe that it would be proper and right for me to appoint that committee, so I shall leave the appointment of that committee with First Vice President Wood.

I thank you, gentlemen, most heartily for your kindness in selecting me for this office. I fully realize that it is a position of honor, and that you have conferred upon me the greatest gift in your power, and my heart is full of appreciation toward every individual member of this organization. I thank you very much, gentlemen.

The Chair: Before the general session adjourns I want to announce that the new council will meet in the adjoining room immediately after the close of this session.

The secretary, by direction of the chairman, read resolution in regard to Committee on Consolidation of Medical Schools at Little Rock.

Dr. Lenow: I appoint Dr. Wood as first vice president to select this committee.

Dr. Wood: I am from Fayetteville, and as Fayetteville and Little Rock are mixed up not a little in the matter of moving colleges and universities, I would like very much to get rid of that enormous responsibility. I would ask, if the president declines to act, that the matter be left to the council.

Dr. Lenow: It has been suggested, and I think it would be a feasible plan, to appoint Dr. Clegg, the retiring president of this society, and will ask him to accept this duty and appoint this committee, with the view of getting these medical colleges together, according to the resolution as passed.

Dr. Clegg: The committee will be announced in due time.

The secretary called attention to the banquet at Bluff City Hall, inviting all members and visitors to participate in the festivities.

On motion, the general session at 2:15 p. m. adjourned *sine die*.

News Items.

GOVERNOR APPOINTS BOARD OF TRUSTEES FOR THE TUBERCULAR SANATORIUM.

Governor Donaghey yesterday afternoon appointed the Board of Trustees of the new Arkansas Tuberculosis Sanatorium created by the act of the recent legislature. The appointments are as follows: George S. Brown, a physician of Conway, two years; J. D. Southard, physician, Fort Smith, six years; Joseph M. Hill, former chief justice of the Arkansas Supreme Court, special counsel for the Railroad Commission, whose residence is Fort Smith, but who makes his home in Little Rock, four years; Hamp Williams, a business man of Hot Springs, and senator from the Thirty-first Senatorial District, six years; Clio Harper, editor of the Arkansas Democrat, of Little Rock, six years; and Kie Oldham, attorney of Little Rock, senator from the Tenth Senatorial District, the author of the bill creating the hospital, four years.

The appointments are effective at once, and within a short time the board will be searching for a location for the hospital. It was thought at first that nothing would be done with the proposed hospital for some time, on account of the poor financial condition of the State, but donations will be made, and through philanthropic aid and some aid from the State the work of locating the hospital and providing for its establishment will be started at once.—*Gazette, June 5.*

GOVERNOR APPOINTS NEW MEMBERS TO THE STATE BOARD OF MEDICAL EXAMINERS.

Second Congressional District—F. T. Murphy, Brinkley, reappointed.

Third Congressional District—Frank B. Young, Springdale, reappointed.

Sixth Congressional District—W. S. Stewart, Pine Bluff.

Seventh Congressional District—J. C. Wallis, Arkadelphia, reappointed.

REPORT OF APRIL EXAMINATION.

Total number of applicants examined, 64, ten of whom were colored; total number of graduates, 21, while 43 were nongraduates.

Total number of successful applicants, 28, as follows: Frank C. Anderson, Isaac S. Butler, Cadmus M. Brooks, Robert Caldwell, Benjamin Franklin Green, S. Wade Glass, Kenneth Bowles Huffman, Irvin Jacobs, James Alexander Logan, R. Q. McClure, William Fred Manglesdorf, Thomas F. Pipkin, Dolphus L. Stevens, Charles H. Watkins (colored), George E. Booth, Joseph Lambert Beasley, James O. Callahan, William Ozro Finney, Charles O. Gamble (colored), Frank P. Hardy, Paul Hayne Jeffery, Ossian Homer King, Rives Andrew Manker, Ulysses S. G. Monroe, Francis M. Nelson (colored), Thomas W. Rhodes, Ernest Alvin Smith, Joseph Samuel Wilson.

Dr. C. C. Stephenson and family left yesterday for Seattle, Wash. The doctor has been in poor health the past winter; the Pacific breezes and the much-needed rest, we trust, will soon restore him. He also goes as the fraternal delegate from the Arkansas Medical Society to the joint meetings of the Oregon, Washington and Idaho State societies, and the Medical Society of British Columbia, which meet in Seattle in July.

Personals.

Dr. R. B. Vinson has recently moved from Hope to Heber.

Dr. W. O. Forbes, of Hot Springs, was in the city a few hours June 3.

Dr. G. H. Martindale, of Hope, spent several days in the city during the latter part of May.

Dr. L. R. Ellis, of Hot Springs, attended the meeting of the Shriners in this city a few days ago.

Dr. Earl Hamil, Pocahontas, was a candidate at the recent meeting of the Shriners in this city.

Dr. J. C. Minor, Hot Springs, was in the city looking after the interest of the State guards.

Dr. I. J. Newton, Monroe, La., spent a few days in the city this week, on his way home from Chicago.

Dr. R. L. Saxon has recently moved to this city from Holly Grove, and opened an office in the Elks' building.

Dr. and Mrs. J. P. Runyan and Dr. and Mrs. W. A. Snodgrass will sail July 7 for a two months' trip to Europe.

Dr. Morgan Smith, our efficient secretary, has been elected physician to the deaf-mute and blind schools for the next two years.

Dr. J. G. Watkins was elected oculist and aurist to the same institutions.

Dr. and Mrs. D. S. Williams, of Texarkana, recently celebrated their golden wedding anniversary. They were married at Arkadelphia May 25, 1859.

Dr. and Mrs. R. C. Dorr, of Batesville, sailed from New York on June 2 for Europe. The doctor will visit all of the larger clinics, returning about October 1.

Dr. H. N. Street, of Centerville, Miss., has formed a partnership with Dr. W. H. Abington, of Argenta. Dr. Abington will go to Texas about July 1 for two months' rest.

Dr. A. E. Harris attended the meeting of the American Medical Association at Atlantic City and will spend several weeks visiting the clinics at Baltimore and Philadelphia before returning.

Dr. and Mrs. William R. Bathurst are in Philadelphia, where the doctor is attending the American Dermatological Association. They will also attend the meeting of the American Medical Association at Atlantic City.

District and County Societies.

POLK COUNTY.—At the April meeting of the Polk County Medical Society, held at Mena, Drs. A. J. Pool, E. D. Smith, I. I. Ramey and C. C. Gunnells were elected to membership in the society.

Dr. A. J. Pool was elected president for the coming year; Dr. F. A. Lee was re-elected secretary; Drs. Watkins, Parks and Gunnells were elected censors. Dr. H. C. Riley was selected as delegate to the State society, Dr. P. R. Watkins, alternate. A fee bill was also adopted, to take effect June 1, 1909, which was published in the county papers.

F. A. LEE, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society held its regular monthly meeting at Blytheville May 11, 1909. The following members were present: Drs. P. G. Noach, H. F. Crawford, E. E. Craig, Thomas F. Hudson, F. A. Robinson, R. P. Nall, W. H. Borum, G. W. Parker, C. C. Stevens, A. L. Franklin and O. Howton. Dr. John F. Sanders, of Friendship, Tenn., was elected a member of this society on a transfer card from Crockett County, Tennessee, and a certificate from the Arkansas State Board of Medical Examiners. Dr. William J. Paris, of Cave-in Rock, Ill., was extended the courtesies of the floor, and took an active part in the discussions.

The papers read were as follows: Amebic Dysentery, with Report of Cases, by Dr. R. P. Nall; Gynecological Report of Cases, by Dr. G. W. Parker; Placenta Previa, Report of Case, by Drs. Crawford and Craig. The papers were discussed at length.

The society will meet at Blytheville on June 15.

Program for Next Meeting.—Raynaud's Disease, Report of two Cases, Dr. Thomas G. Brewer, Osceola; Miscarriage and Abortion, Dr. W. H. Borum, Blytheville; clinic by the Blytheville physicians. O. Howton, *Secy*.

LAWRENCE COUNTY.—The Lawrence County Medical Society met in Walnut Ridge, at the office of Dr. J. C. Hughes, Wednesday, June 21, and, among other propositions, talked over the matter of establishing a hospital. The visiting doctors were: J. E. Pringle, of Hoixie; A. G. Henderson and Octavis Hatcher, of Imboden; J. W. Morris, of Denton; Andrews and Stephens, of Clover Bend.

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Original Articles.

TUBERCULOSIS A HOUSE INFECTION.*

Dr. D. S. Warren, St. Louis, Mo.,
Passed Assistant Surgeon, U. S. Public Health
and Hospital Service.

The question of control of tuberculosis presents such a broad field, with so many intricate problems for solution, that it is impossible to consider all of them in a paper of this nature.

The questions which I wish to discuss to the exclusion of others are, tuberculosis as a house infection and the colored race as a factor in its spread.

The discussion of the house infection presents for consideration, first, the source of infection or the individual suffering with the disease, and the importance of an early diagnosis and report of the case. It is here that the health officials need the assistance of all the people, and it is here that the societies for the control can be of such material assistance in the work of their members as inspectors. The sufferer, as a rule, must be sought in his home. For this work the members of the society who have the time and are adapted to this kind of work should be selected, and, where necessary, they should be paid out of the society funds and not from state, county or municipal funds.

I make this statement because any efficient effort at control will require the expenditure of considerable money, and more, as a rule, than the public treasury can afford to appropriate for this purpose. It is therefore proper that the society pay its own members, unless the member can afford to do the work without remuneration.

It is useless to dwell on the fact that the inspectors should be adapted to the work, for one not talented in this direction will probably do more harm than good.

The report of the case to the health department should include such information as is usually required: Name, occupation, address, business address, members of the family, and any other facts pertinent to the case.

It is hardly necessary to state that all doctors should be compelled to report cases that occur in their practice. Free dispensaries for the relief of the sufferers should be established in convenient localities, for the double purpose of locating the disease and treating the patient. When once located, the case should not be lost sight of by the health authorities, if possible to prevent it.

In instances where there is an attending physician who will sincerely become responsible for the enforcement of the prescribed regulations, the patient should not be molested by the officials except when necessary for fumigation purposes.

The house should never be placarded, and the patient should be let alone so far as consistent with proper regulations. Every member of the family should be carefully examined by a physician for incipient cases, and every means possible used to settle the diagnosis in doubtful cases. The same plan should be followed in reference to his very intimate associates, unless this should subject him to persecution by the phthisiophobist. However, this point will have to be left to the discretion of the health officer, who should weigh the possible harm against the possible benefit.

Having located the patient in his home, the question next arises of how to dispose of him. Whether he shall have a change of climate with or without sanatorium treatment, sanatorium treatment without change of climate for all or a part of the time in a day or night camp, or be treated at home, is a

*Read before the public meeting on tuberculosis, at Pine Bluff, May 20, 1909.

question too extensive to be discussed here. Suffice it to say that segregation of all those suffering with the disease is an ideal to be sought and approximated as near as possible.

It is well to bear in mind the great benefits derived from sanatorium treatment. The patients are segregated in this way, the home is cleared of its source of infection and can be disinfected, the change is so often of enormous benefit to the patient, and the percentage of apparent cures is so very encouraging—especially in the incipient stages where only a few months frequently results in a cure; the training received at the institution is of inestimable value after he returns home to prevent its reinfection.

The great majority of all cases, soon or late, become home cases, and a great number have to be watched by the health department for the enforcement of proper regulations.

Where there are no other methods of education, a competent trained nurse or physician should be sent into the home to instruct not only the patient, but every member of the family, in the rules of life required to prevent its spread.

The absolute necessity for this is so obvious in so many cases that I will not make any argument in its favor, but will say that the public should be educated to that point where they will not resent the interference of the health officer. This is a free country, but no one is free when that freedom endangers the health of the community. This principle underlies all public health work, and the same is just as applicable to the state when it is a menace to other states, and it is here that the federal health official must be relied upon to do his part in this work.

If he is a home patient he should, when possible, live outdoors at his home, in a tent house especially prepared for him, and go into the home very seldom. If this cannot be arranged, a sunny, well-ventilated room should be assigned for his exclusive use, and he should frequent other parts of the home as little as possible. In case neither of the above procedures are possible, he should at least have a bed to himself, separated from the other beds in the room as far as possible.

After the question of disposal of the patient is settled, there arises the question of the house if he is left as home patient. Here, as in nearly every discussion of the subject, arises the problem of expectoration, collection

and disposal of sputum. This is made so vitally necessary because it is the chief source of infection. You will not be surprised at this when I tell you that Cornet estimates that a single patient may expectorate seven billion, two hundred million bacilli, or germs of consumption, in a single day. Estimating the population of the United States at ninety million, there would be eighty to each man, woman and child, or sufficient to infect the whole population in one day if properly injected.

The care and disposal of sputum in the home is a matter of education, and here the rules can and should be enforced if every member of the family will do his duty after he knows where it lies.

All should spit in spittoons, spiteups, or some convenient receptacle containing some good liquid antiseptic that will prevent its drying until it can be properly disinfected by boiling, or some other as efficient method. Never finally dispose of it until it is satisfactorily sterilized. The receptacle should always be carefully guarded, especially against the invasion by the house fly or other insect carriers of disease. This, and care in coughing, sneezing, etc., will reduce in a great measure the chances of home infection.

Rules relative to cleanliness of person, care of clothing in the laundry, separate bed linen, kissing, touching food intended for others, drinking from the same glass, etc., should be included in the cautions promulgated by the health authorities.

In so far as possible, every room and hallway in the house should at some time during the day receive direct sunlight; at least, there should be no inside rooms or halls that never receive daylight. Sunlight is nature's great disinfecting agent, and tuberculosis germs live only a short time (one to two days) when exposed to its direct rays; whereas, they may live indefinitely in a dark, moist place. No degree of cold will kill them, and after boiling for five minutes they have been proven to be alive and infectious for guinea pigs.

All members of the family, especially the susceptible and the children, should be carefully guarded and their resistance to the disease increased by outdoor life, good food, good clothes, and any other possible method.

Whenever, by death or removal, the patient's room is vacated, the house should be thoroughly fumigated and cleaned. Fumigation by formaldehyde is efficient and is not destructive to any of the furnishings. Mechanical cleaning of all woodwork, floors, etc., repapering and repainting, and the like, is as

important as fumigation. It is well to fumigate every house before moving into it, as, at that time, the inconvenience is not great. Surely, regulations as to fumigation, cleaning and general renovation of every house known to have been occupied by a tubercular patient should be enforced by or under the direct supervision of the health department, and not left to those who are untrained in disinfection methods.

This concludes, in a general way, the consideration of the tubercular patient in relation to the home. My reason for selecting the home cases as a part of my subject is the fact that here is where a large percentage of the cases originate. It is a disease that is propagated from home to home, and this fact may account to some extent for the idea that it is an inherited disease. It is estimated by careful observers that 60 per cent of all cases of tuberculosis give a history of others in the same family.

Knowing this, I feel that too much cannot be said upon this subject to impress it on the public, nor can too much attention be given to the housing question, especially of the poorer classes in city, town and country.

The colored race, as a factor in the spread of tuberculosis, is a condition almost peculiar to the Southern states.

The South has not made the progress in sanitary matters that it has in others. This lack of attention to sanitation is telling against it in financial progress, for the investor hesitates to place his money in a country which he considers unhealthy. Some of the large life insurance companies will not write insurance below certain parallels of latitude, all giving as their reason that it is semi-tropical and subject to so much greater risk on account of the heat, etc.

Now, under modern sanitary methods, we know this is not true, as witness the health conditions in Havana, Manila and Panama under the enforcement of modern sanitary laws.

Before the Civil War the Old South was not considered an unhealthy zone by her Northern neighbors. In those days the planter lived on his plantation in his old-fashioned residence and the negroes lived in quarters provided by their master, with good food and clothing furnished on a basis to bring about the strongest and healthiest conditions possible, as that meant the greatest financial returns. The spread of controllable diseases was not nearly so likely under those condi-

tions, even though present sanitary methods were then unknown.

Conditions have changed. The negroes have either left the farms to crowd into the cities, or have been left by the whites on farms extending over great sections of the states known as the "Black Belt," where there are ten negroes to one white. This condition, with the poverty resulting from the Civil War, accounts for the greater part of unhealthy conditions. With poverty and overcrowding comes a great increase in the tuberculosis death rate. Even in the country districts, where the death rate should be lower than in the large cities, it would, if correctly reported, exceed that of the cities.

The negroes in the "Black Belt" are left to themselves and, with their shiftless nature, are poorly housed, fed and clothed, especially during the winter months. They crowd into their little huts scantily clothed, collect around one little fire during the winter nights, and sleep three and four in a bed for the lack of covering, waking next morning to eat a breakfast of corncake and, maybe, a piece of fat meat and a cup of coffee.

The grown-ups spit on the floor, which is seldom, if ever, cleaned. The babies crawl over the same floor, soiling it, and eating whatever is given them, after probably infecting it on the floor.

This picture is not overdrawn; I know of what I am speaking, for I practiced medicine in one of the "Black Belts" of Alabama for six years. I recall one instance where a negro boy was sentenced for stealing some article of small value, an overcoat, I believe. He returned after eleven months, with a moderately advanced case of tuberculosis, to board in a family consisting of father, mother and five girls. Today only the father lives; all the others died in less than five years' time with tuberculosis.

Conditions are worse in the small towns and worse in the large cities. The conditions of the poor whites in other sections are not much, if any, better. These whites, however, are leaving the country to work in the cotton and other mills of the cities, where their condition may be somewhat improved by the enforcement of municipal regulations, although the crowding and poverty are not much relieved.

When the general prevalence of the tubercle bacillus is considered (some pathologists report either healed or latent tubercular processes in over 90 per cent of all autopsies,

and in Osler's *Modern Medicine* it is estimated that at one time or another during life 50 per cent of all people have had tuberculosis in some form), is it any wonder that the death rate among the colored population of the South is so high, and the death rate from all causes is exceeding the birth rate? These conditions have brought about considerable discussion of the possibility of the extinction of the race.

The importance of this question to you is evident, when you consider the intimate relationship in the family of the cook, house girl, nurse girl, and numerous other relations of the two races in their daily life. The danger of this as a source of infection for all is so imminent that it should receive very prompt and decisive action on the part of the health authorities.

In looking over the field and being confronted with this situation (for I judge that conditions in Arkansas are not much better than in Alabama), I wonder that you had the courage to begin a campaign against tuberculosis. The campaign, however, is forced upon you from two standpoints—humanitarian and financial.

It is estimated by Fred L. Hoffman, statistician for the Prudential Life Insurance Company, that the net loss to the United States from this disease for one year is \$240,000,000. Distributing this loss according to the population, Arkansas loses more than \$2,500,000 a year. If, by any method of control, the number of deaths could be reduced one-half, the loss of \$1,250,000 could be saved to the state, and the suffering of humanity from this loathsome disease would be reduced one-half. In addition, the chances of infection to yourselves and your children would be greatly lessened.

The task before you, though great, does not appear so hopeless as the same task did for Mr. Biggs, of New York, who, with very little assistance, forced upon that city laws and regulations which are now recognized as models of the prophylaxis of tuberculosis.

Tonight, hearing of all the dangers and chances of infection, I judge, from a layman's point of view, you consider the expectation of doing anything for the control of this disease rather a hopeless task. I must confess that, from my viewpoint, I consider its final eradication a work of years. But much has been done and much remains to be accomplished.

Where statistics have been accurately kept, great progress is shown during the past

twenty-five years. Massachusetts, where such data has been collected, shows remarkable results. In 1881 the death rate per hundred thousand population in that state was four hundred from this disease alone; the death rate for 1906 was only two hundred and twelve per hundred thousand. All of this improvement may not be due to measures of control; other causes, which I will not discuss here, are tending to reduce the death rate, but certainly the larger part of the improvement is due to the efforts of the people of that state.

There is so much to be done that there is room for all to work who will. The establishment of free and moderate-priced sanatoria in a climate in which the patient must live and labor after his recovery, the day and night camp for those who cannot stop work, free dispensaries for all who suffer with the disease, a corps of trained nurses to visit the sick, a corps of visiting inspectors, and other works of this character, is the field for the societies or individuals who are charitably inclined and have the time or money, or both, to spend on the cause.

Organization and united effort are what is needed in addition to large sums of money. But it is surprising how much can be accomplished by united efforts with very little money.

It is of little use to talk of proper state machinery until proper legislation can be secured, carrying large enough appropriations to maintain it. The same may properly be said of the national health department.

It is impossible to account for the value placed on human life and suffering, but it seems secondary to about everything else that comes up for legislation. The United States spends about one billion dollars annually, and only a few hundred thousand of this sum is expended upon public health matters. Large amounts are appropriated every year for the prevention of disease among cattle, hogs, etc., and the same may be said regarding experiments to suppress the boll weevil. When we come to the consideration of man and his sufferings, the treasury cannot afford the expenditure—economy is the watchword. So it is to the public that we must come with our plea and create such a sentiment on this subject until the "roar of a thousand Niagaras" will not be able to drown the voice that calls for rational legislation and sufficient appropriation.

What is the cost compared with the suffering of the two hundred thousand who die

every year with this disease? If we could only marshall this army of one million sufferers into one battle line, with all the glitter of war trappings, and have them rush to a bloody death amid the fanfare of trumpets, what a noise would be raised over the world! What monuments would be erected to the dead heroes! No spirit of economy could prevent the voting of gold medals and pensions. How different it all is—the sufferer silently, with pale, tense face, enlists for a period of four years for a lone fight with death. As he falls in the fight he is buried, with only a few of his loved ones to gather around, and that is the end.

This is an awful picture, it is useless to dwell on it longer. The time has come for action. This is the day of practical things. What if sanitary legislation is so far behind sanitary science? The thing to do is to make it different, and the only way to accomplish this is to remember the words of Benjamin Franklin: "If you want anything done, go do it yourself."

I wish to read from the New York Medical Journal of May 15, 1909:

"Ground has been broken for the construction of the group of sanitary tenements to be erected by Mrs. William K. Vanderbilt, Sr., in East Seventy-seventh and Seventy-Eighth streets. The execution of this design, providing as it practically does for sanatorium conditions to be enjoyed as long as need be by consumptives and their families, will doubtless mark a new and hopeful era in the home treatment of tuberculous disease. The demonstration in recent years that climate is not so very important a factor in successful treatment as has been thought, the excellent results obtained in sanatoria in all sections of the country, and the recognition of the fact that the sanatorium is always a costly and often an impracticable means of obtaining temporarily fresh air, light, and decent living conditions for the tuberculous poor are considerations which have led up to the evolution of the sanatorium tenement. The advantages, aside from economy, are the avoidance of interruption of domestic life and the dispersion of young children; the fact that the patient is not returned after a brief period of hygienic living to the slum conditions which generated his disease, but is given a chance to get well in the favorable environment in which he may continue to live; and, most important of all, the protection of a healthful home for others in the patient's family who in the usual

tenement surroundings are extremely likely to furnish additional victims to the disease."

ADDRESS OF CHAIRMAN OF THE SECTION ON DERMATOLOGY AND SYPHILOLOGY.*

L. R. Ellis, M. D., Hot Springs.

It seems that with the reports and epitomes of nearly all departments of medicine in the excellent journals now on every doctor's table, the section chairman's custom of making his annual address a review of the year's progress is a misappropriation of time and no longer desirable at these meetings. I shall confine my remarks, therefore, to a few of the more notable discoveries of the past year.

While the past year has produced no epoch-making discoveries in the field of syphilology and dermatology, nevertheless, much valuable, though as yet unknown, work has been done in these fields of human endeavor. Many patient, gifted and conscientious investigators, armed with improved and improving technic and facilities for scientific exploration, are at work to advance our certain knowledge. That this advance is not more rapid and conspicuous lies in the very nature of the problem.

SYPHILIS.

Diagnosis.—The enormous amount of work done on the Wasserman reaction appears to have established conclusively its value as a diagnostic means in syphilis. For while the reaction cannot be considered as specific in the bacteriologic sense of the word, as was at first believed on theoretical grounds to be the case, it is apparently characteristic, and the few other diseases, principally the other spirochæte and the trypanosome infections that give the reaction, are of such rare occurrence in the temperate zones as to be practically neglected. Unfortunately, the test as at present used is altogether too complicated to be available for the general practitioner, and it will have to be simplified considerably before it can be placed on the plane of the agglutination test for typhoid fever.

Wile, of Berlin, Germany, tried to modify the Wasserman reaction so as to make it applicable to the urine, in which he had demonstrated the presence of complement binding

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substances. As the result of his investigations, he found that the urine in a large percentage of cases of syphilis contained substances which behave in the same way as the anti-bodies in the serum of the same cases. He found them later in the urine, then in the serum, and also determined that in both serum and urine these bodies tended to disappear under vigorous anti-syphilitic treatment. The diagnostic value of the reaction must, however, at the present be used with caution, since reactions were found in the urine, while the serum in these cases was negative.

New methods for demonstrating the presence of spirochæte have been published during the past year, but since there will be presented to you a paper on this subject, we will not discuss them at this time.

Treatment.—The advance in our knowledge of syphilis, following the discovery of the spirochæte pallida and the application of the principal of immunity, has not changed the place occupied by mercury as to the specific drug in the therapy of this affection. On the other hand, the mode of action of the metal is now better understood, it having been shown, for instance, in the so-called "inunction cure," the absorption of mercury takes place as much or more by the inhalation of the vapor than through the unbroken skin. The discovery of this fact gave origin to several methods of administering mercury, one of the best being that devised by Kromayer, who employs a mask of soft wire which supports some gauze impregnated with the metal in a state of fine division. Bendig and others have tried this method in a large number of cases, and report their results in the *Munchener Medicinische Wochenschrift*, for September, 1908.

In every case the effects of the treatment were quickly obtained, two or three nights of wearing the masks being sufficient to produce a marked repressive effect upon the lesions of the disease. Especially good results were obtained with the treatment in syphilitic sore throat during the secondary stage, which is perhaps the most irksome symptom of the disease for the patient, and certainly most dangerous to his innocent neighbors. These results were, moreover, obtained without any untoward effects from the inhalation of the metal, only one case out of forty-eight cases of mercurial stomatitis having been observed. Chemical examination of the urine showed that there was a progressive increase in the

quantity of metal absorbed, as well as in the amount of urine excreted by the patient. We believe it would be well to make a regular examination of the urine to forestall the introduction of too much mercury into the organism, as well as to recognize in time any untoward effects of the metal upon the kidney. In general the inhalation of mercury has proven superior in many ways to the inunction cure. It is certainly less unpleasant to the patient than either the inunction or the injection of mercury, while it possesses the marked advantage of not causing any disturbance in the gastro-intestinal tract so common after the internal administration of mercury. These considerations are sufficient for a trial of the method in practice so that further experiences with its application may be reported in the near future.

Prophylaxis.—The presence of syphilis among the negro population of the South has demonstrated that it is impossible to take a race, not even one or more than one generation removed from savagery, and put that race on parity with those whose struggle toward their present state has consumed centuries of time and immeasurable effort. Yet, unfortunately, that is what is attempted too often by the nation which would shoulder the white man's burden. Such attempts not only fail to rebound to the credit of those who have attempted to civilize by hot-house methods, but they spell, as in the case of the colored race, ruin and misery to the unfortunate recipients.

Colonel F. J. Lambkin, on "Syphilis in the Uganda Protectorate," shows that the emancipation of the native women from their tribal customs and religion has brought about an astounding laxity of morals. Sexual intercourse under civilized regime has become promiscuous, and syphilis, probably introduced by the white traders, has spread just as among our negro population to an alarming extent. Under the severe penalties for sexual offenses which the native customs prescribed, venereal diseases were comparatively rare. These customs once abolished, the women, who are little better than animals with strong sexual passions, were free from their restraining influences. The result is that the very existence of the race is threatened. The terrifying malignancy which syphilis has exhibited among these people is due, probably, to two causes: One suggested by Colonel Lambkin is the virgin soil into which the infection is introduced; the other is the well-known fact that in the tropics

syphilis takes on a virulence almost unknown in the temperate zone. Shaudin's discovery of the spirochæte, as well as Wasserman's discovery that the fluids of the infected react specifically, has not alone given us the means by which syphilis may be definitely determined at an early stage, but has also taught us the infectiousness and contagiousness of this disease. Since the disease is more far-reaching in its consequences than any other infectious disease, and is capable of transmission to the progeny, regulations should be enacted making the disease a notifiable one and restricting the individual during the infectious period. More efficient regulations concerning drinking fountains and other public utensils are also required, since the mucous patch represents the most infectious of all the syphilitic lesions.

Twenty years ago Fournier said that matrimony was safe at five years from infection, but now he says that the limit should be placed at seven, and we believe that this time limit will be lengthened and not shortened with the lapse of time. The question "Should syphilis disqualify an applicant from railway employment?" is receiving a great deal of attention from railway surgeons. The real importance of this question is for us to determine how serious a factor is syphilis in disease and injury to the employee, and second, the fact that some of the outbreaks of syphilis come on suddenly. That they may befall a man when he is at his post, perchance at the throttle of an engine, at the levers of a switch tower, at the key when holding trains and lives at his finger tips, or whilst controlling the motor of a street car, etc. A fulminating attack of hemorrhage of the labyrinth and he is unable to hear correctly, or to maintain his equilibrium. A sudden hemorrhage of the retina and he is unable to distinguish colors and may be unable to see. A sudden cerebral hemorrhage in apoplexy and he cannot move, and may not even be able to retain his sitting position. A sudden spinal attack and he cannot walk or move his extremities. A sudden cerebral attack and he is a maniac, and what a horrible contemplation is that! A sudden maniac at the lever, at the throttle, at the key, at the motor. Recognizing and admitting the infection which lasts for years, if not throughout the entire remaining part of the individual life, why should we be willing to recommend a man who may become such a public menace.

At the recent International Congress of Life Insurance Medical Directors at Berlin, many valuable papers were presented on the subject of the "Effect of Syphilis on the Mortality Rate." The Scandinavian companies had an actual loss of 128.5 deaths for every hundred expected. The American companies had 133 deaths for every hundred expected. And the mortality was 5 per cent in excess of the normal, even as late as thirty years after infection.

These data should stimulate to renewed and increased vigor in our effort to check the progress of this dread scourge. Above all things, we should make greater efforts toward preventing infection, for an ounce of prevention is surely worth pounds of cure.

In the realm of dermatology I desire to direct your attention to the fact that we are having in the Southern States an epidemic of pellagra. Since there is in the section of medicine a paper dealing with this disease, I will not discuss it in detail. This epidemic brings to us a number of problems, the solution of which will well repay investigation. Despite the extensive use of maize in this country, pellagra has been so rare that, until recently, it has received but little attention from American physicians. It has long been prevalent in European countries, especially in Roumania and Italy, and the literature on the subject is large, the list of titles referring to this disease in the index catalogue of the Surgeon General's Library occupying eight or nine pages.

In a monograph by C. H. Lavinder, of the United States Public Health and Marine Hospital Service, something may be learned of the importance of pellagra in Europe. In Roumania 50,000 individuals are afflicted with this disease, and in Italy about 100,000. Lavinder discussed the peculiarities observed in the American cases. The appearance of the disease in epidemic form indicates that some marked change must have occurred in a part of the maize crop, for such epidemics have not been noticed in former years. The relatively acute form and high mortality distinguishes the American from the European cases. This has led to some doubt as to the diagnosis, but we must expect variations in the symptomatology of the disease. If present views of the cause are correct, the poison must vary in quality, and possibly in virulence, according to the number and kind of fungi which produce the poisonous products.

The causes of this variation in virulence merit careful investigation.

In general, the cause of pellagra is recognized to be the use of maize of poor quality. The particular change that brings about the deterioration in quality is supposed to be the result of the growth of certain fungi constituting the smut of corn. These fungi probably vary in different seasons and localities. This difference may account for the sudden appearance of the cases in the southern parts of the United States and for the greater acuteness and virulence. Another important point to be decided is whether the poison is formed during the growth of the corn or develops after the grain is stored, or even after it is in the intestinal canal. The extensive use of maize in the Northern States suggests the possibility of obscure forms of the disease arising from a milder form of intoxication from such low-grade grain. Animals, dogs, horses, as well as fowls, suffer also from the disease.

Careful inspection of maize intended for human food would appear to be a proper prophylactic measure, and should be instituted at once.

In conclusion, I deem it my duty, in as emphatic manner as I can, to direct your attention to two potent factors in the causation of diseases of the skin, potent beyond all others for evil, and to this and coming generations of the children of men—syphilis and alcoholism. I do not know to which of the two baneful influences to award the palm of malignancy. Like unto two evil spirits of hate they hover along the stream of life, even at the fountain, and pollute, blight and destroy all living and aspiring tissue even unto the third and fourth generation. The sad, and also the hopeful, part in this matter is that these destroyers are acquired, and this not by necessity. As teachers of men in matters salutary, it behooves us to warn and instruct our brother who has had less opportunity for information against these dangers besetting his path. Let us not be remiss in our duty.

Besides the preparing of the address, it is also the duty of a chairman to prepare a program worthy of presentation for discussion by such a learned body, and though, as always happens in the performance of this duty, there have been some disappointments, they are such as to not at all lessen the satisfaction I have in announcing the able papers about to be read to you. I thank you.

THE PATHOLOGY OF MITRAL LESIONS.*

O. K. Judd, M. D., Little Rock,
Chairman of the Section on Pathology.

A little less than a year ago, following the adjournment of the State Medical Society, I was somewhat startled by the information that I had been appointed chairman of the Section of Pathology. Having made no special pretense along the lines pertinent to this section, though I consider it the most important part of medicine, I was at a loss to know just why the selection had been made, as I have been so situated that it has been impossible for me to attend the meetings of the State society in the past, and am acquainted with but few of its members. However, as the duty of presiding over this section had already been imposed, and not desiring to shirk any of the responsibilities as a member of the State society, I have endeavored to at least keep the section alive. This section, I understand, was instituted only three years ago, and I trust it shall never suffer by lack of interest, though the address of its chairman is to be text-book in character.

The subject of my paper is "The Pathology of Mitral Lesions," and I claim for it a very little originality.

The great majority of cases of valvular lesions originate in acute or chronic endocarditis. A single attack of acute rheumatism may leave the valves in a seriously damaged condition, but more frequently contraction and thickening of the valvular apparatus continue after the acute stage has passed off, and the leaflets gradually become deformed and defective in function. Recurring attacks of endocarditis are liable to occur in valves once damaged by this cause, and slight defects may terminate in serious and irreparable injury. Other diseases of childhood are responsible for a certain number of cases, while no etiological factor can be determined for a considerable proportion.

Valvular deformity may also originate in a chronic sclerotic process, comparable to the changes which take place in sclerosis of the vessels. All conditions which keep up permanent high tension lead to thickening and puckering of the aortic and mitral segments, while certain poisons, alcohol, tobacco and syphilis,

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may cause primary sclerotic changes in the valves, just as they do in the arteries.

In mitral insufficiency, which is the most common of the valvular lesions, the structural changes of the valve, permitting regurgitation of the blood, are mainly thickening of the cusps, with increased rigidity, that prevents perfect coaptation, or the shortening or retraction of one or both of the leaflets in such a way as to permit the reflux of the blood. The segments lose their normal pinkish transparent appearance, thin delicate feeling, and become stiff and of an opaque whitish or grayish color. Contraction of the fibrous tissue may cause retraction or shortening of one or both of the cusps, or curling of their edges in a manner to prevent effective closure of the valve. In the valvular disease following acute endocarditis, the shriveled and often calcified remains of old vegetations may be found on the auricular surface of the valve along the line of maximum contact. When these old vegetations are numerous the mitral ring is usually fibrous and contracted, leading to a condition of stenosis, as well as regurgitation. Very commonly, also, the tendinous cords are often found more or less matted together, stiffened and shortened, so as to still interfere with perfect action of the valve. The deposits of calcareous matter is by no means limited to the old vegetations, but may affect the valve cusps, the chordæ tendinæ, or even the mural endocardium in the neighborhood. In fact, the deposit of lime salts may in some instances be so extensive as to convert the entire valvular apparatus into a firm calcareous mass, having no resemblance whatever to the original structure.

The local changes in the endocardium, however, form but a small part of the morbid changes found in a case of mitral insufficiency. The changes in the circulation, and the effect on the heart wall and on the other organs of the body also take place and require description. Whenever mitral regurgitation occurs a portion of the contents of the left ventricle is forced back during systole into the left auricle, which at the same time is receiving the normal flow of blood from the pulmonic veins. The chamber is consequently surcharged, and as the two streams enter it during its diastole it becomes overdistended. At the same time, in consequence of its dilatation, the auricle has greater work to perform in emptying itself of this increased amount of blood, and in accordance with the physiological law that an organ that has increased work to do will, so long as its nutri-

tion is unimpaired, manifest increased power for work, the walls of the auricle at length become thicker and stronger. In time, therefore, the auricle comes to be both hypertrophied and dilated.

If these changes in the circulation come on slowly, and time is afforded for compensatory changes in the heart to develop, the nutrition of the heart muscle, and indeed the integrity of the circulation, may suffer no serious injury. Furthermore, if the auricle is able to deliver an increased volume of blood to the ventricle, this chamber is able to discharge into the aorta, in spite of the regurgitation, an approximately normal amount of blood, and adequate arterial circulation is maintained. So far, then, the hypertrophy and dilation of the auricle compensates the valvular defect, which may consequently exist for a long time without producing any inconvenience.

If, however, the leakage is extreme, or if it becomes so with the lapse of time and the auricle is unable to completely empty itself, a residue remains, which interferes with the inflow of blood from the pulmonary veins. Thus takes place an accumulation of blood (passive congestion) which, acting as increased peripheral resistance to the work of the right ventricle, leads to hypertrophy and dilation of this chamber. Moreover, the stasis within the lungs induces in them the condition known as brown induration, in which the connective tissue elements are increased, the veins are engorged, and the whole organ is of a dark brown color in consequence of pigment deposited by the disintegrated blood. In advance stages there may also be pulmonary œdema and hydrothorax from transudation of serum out of the engorged vessels. There is always more or less bronchial congestion in consequence of stasis within the pulmonic vessels.

When at length blood pressure in the pulmonary artery grows excessive, the wall of the right ventricle finds its work too great, and, yielding to the strain, permits dilatation to supersede hypertrophy. This chamber is now unable to fully empty its contents, stasis within it grows, and at length causes such dilatation that the tricuspid orifice stretches, and its valve is no longer able to close adequately. In cases of long standing and extreme pressure in the pulmonary artery, stretching of its ostium is also occasioned, and leads to relative pulmonary incompetence.

So long as the left auricle and right ventricle are capable of coping successfully with

the back wash from the left ventricle, the work of the right auricle is not especially increased. When, on the contrary, the right ventricle begins to yield to the strain, particularly when it becomes dilated, back pressure is exerted upon the right auricle and great venous system. Veins everywhere grow more or less turgid, and the internal organs display the effects of engorgement. The liver in particular becomes enlarged and in time indurated, and one section shows the peculiar mottling that has given to the organ in this condition the name of nutmeg liver.

In the stomach and intestines passive congestion leads to chronic catarrh of the mucosa, and in the kidneys to cyanotic induration, or even chronic nephritis. None of the internal viscera escape, while the veins share in the distending effects of stasis and become relatively larger than the arteries. Back pressure creeps downward into the vessels of the lower extremities, and as circulation grows still more sluggish, serous transudation finally makes its appearance. Commencing in the feet, dropsy gradually extends upward, invades the peritoneal cavity and walls of its contained viscera, and in extreme cases the serous cavities within the chest, and finally the lungs. These are the secondary effects that are produced behind the seat of the original lesion. There are, in addition, certain effects of mitral regurgitation in front of the lesion. These are the hypertrophy and dilatation of the left ventricle found in cases of free and uncombined mitral insufficiency. This enlargement seems rather remarkable at first thought, since one would naturally think the chamber ought to be smaller than larger in size. At one time this condition of hypertrophic dilatation was explained on the hypothesis that in consequence of venous and capillary stasis blood pressure was increased in the arterial system, and that hence there was augmented intraventricular pressure, which resulted in dilatation, with increased demand for work, which led to hypertrophy.

This theory is now known to be incorrect, and has been replaced by the following: Owing to the abnormal volume of blood contained by the left auricle at the close of its diastole, this chamber, which has become hypertrophied, discharges with great force an unnatural amount of blood into the ventricle. This cavity is in a state of diastole when it receives this inrush, and, being relaxed, becomes after a time dilated. At the same time it is forced to handle a larger volume of blood, which it can only do by undergoing

hypertrophy, and thus at last this ventricle comes in its turn to feel the secondary effects of the circulatory disturbance.

In time, moreover, when stasis has become everywhere apparent, the left ventricle undergoes still further dilatation, for which it has become prepared by certain structural changes within its myocardium. Its myocardium is flabby and of a brown, instead of the normal, beefy red color, while its fibres are found microscopically to be reduced in size and to contain granules of brown pigment, especially near the nucleus. This increased dilatation of the ventricle at this time is explained by some as due to the high blood pressure in the arterial system secondary to stasis in the veins, which abnormal arterial blood pressure interferes with the easy emptying of the ventricle. This is a defective explanation, however, since physiologically the abnormal blood pressure in the venous system leads to lowered, instead of heightened, blood pressure in the arteries. The dilatation of the left ventricle is now due to the weakness of its own wall, which does not permit it to completely empty its cavity with each systole. Thus is established a residue which augments the amount of blood received from the auricle with the next diastole, while at the same time its wall is powerless to withstand the dilating force of this stream that pours into it. Thus is at length set up a vicious circle in consequence of which the effect of the original valvular incompetence intensifies the regurgitation.

The typical heart, then, of mitral insufficiency is enlarged. The enlargement is mostly of the right ventricle, and the organ has in consequence a rounded apex. The tricuspid orifice, and often the pulmonary, is found to be wider than usual, owing to the dilatation of the right ventricle. The left ventricle is moderately and the left auricle greatly enlarged, while the mitral valve shows the structural changes already described, which have been the cause of the whole trouble.

The effects of mitral stenosis on the circulation, pulmonic and systemic, and the effect on the myocardium in producing brown atrophy, and the congestion of the various organs of the body, are the same as in mitral incompetence, therefore the primary condition alone will be described in connection with this lesion.

Anatomically, there are two forms, the pure or membranous, in which the left auriculo-ventricular ring is surrounded by a thin membrane representing the fused valve segments,

perforated by a narrowed orifice which admits the tip of the little finger. The membrane is a little thickened, but it is pliable, the edges are smooth and may be readily placed in opposition, so that it is possible during life that the valve has been competent. These are the cases of what the French call pure mitral stenosis, and it is this form more particularly that is met with in women in whom no history of rheumatism or other etiological factors can be found. From the auricle this form presents a remarkable funnel shape. In the other variety the valve segments are greatly deformed, the chordæ tendinæ thicken, and with the irregular calcified excrescences with atheromatous plates, the whole valve and ring are converted into a rigid mass, in the middle of which there is a linear slit, or a rigid orifice that admits the top of the thumb or the index finger. The heart itself is not greatly enlarged, and may not weigh more than fourteen or fifteen ounces. In elderly persons the organ may, indeed, look small. The left auricle, as a rule, is greatly enlarged, and may hold several hundred cubic centimeters of fluid. Normally, the capacity is under fifty cubic centimeters. Cases have been reported in which it has held 500 or even 650 cubic centimeters. The appendix is usually greatly enlarged. The endocardium is very opaque, and when the dilatation is extreme the walls are very thin and fibrous. In the early stages, as Samways pointed out, the hypertrophy of the auricular walls is very marked.

The chambers on the right side are much enlarged, the ventricle contrasting in a remarkable way with its fellow; indeed, the apex of the heart may be made up entirely of the right ventricle. While this may be said to be the rule in mitral stenosis, there are some instances in which this contrast is not so striking, and the left ventricle may also be hypertrophied. The right auricle is greatly enlarged and the tricuspid orifice is much dilated.

Following is the history of a case of mitral stenosis which came under my observation in the wards of the Logan H. Roots Memorial Hospital in 1907, which I was enabled to autopsy, and herewith present specimen for your inspection:

Will Miller, colored, a laborer, aged forty, was admitted to the wards on August 7, 1907, complaining of pain in the chest and back, shortness of breath and cough with blood-tinged expectoration. He denied having had syphilis, gonorrhœa, or any of the diseases

of childhood. Had rheumatism in 1889, and also in 1905. He became weak and breathing difficult two weeks ago. Temperature, 98; pulse at wrist, 80; small, irregular in force and rhythm; pulse at apex, 134, and irregular; heart very much enlarged, apex in sixth interspace, ten centimeters from median line; widest area of dullness, fifteen centimeters at base. Slight thrill on palpation; rough murmur, presystolic in time, heard loudest at apex; pulmonary second sound accentuated; aortic diminished; spleen not palpable; liver dullness extends from fifth interspace to seven centimeters below costal margin; lungs dull at base, with moist rales. Feet were slightly swollen, also slight abdominal ascites. Respirations, twenty-eight, irregular and labored. Urine showed hyaline and granular casts; sputum, red and white cells.

Diagnosis was made of mitral stenosis.

Patient grew rapidly worse, developing tricuspid insufficiency, evidenced by a loud blowing murmur, systolic in time, heard best over tricuspid area, accompanied by liver pulsation.

Patient died on fourteenth day after admission.

Autopsy showed dilated right ventricle and auricle, also dilated left auricle; left ventricle about normal in size; mitral opening very small, buttonhole in outline; leaflets of valve stiff and adhered, showing numerous atheromatous deposits on auricular surface; cordæ tendinæ thick and shortened, retracting valve, giving it a funnel-shaped appearance.

OUR DUTY TO THE LAYMEN IN PREVENTIVE MEDICINE.*

H. H. Niehuss, M. D., Wesson,

Chairman of the Section on Practice of Medicine.

I want to thank every member of the Arkansas State Medical Society for having honored me with the position I now occupy. Words cannot express my gratitude. I also wish to thank you for having selected as secretary one who was able and willing to do even more than her part. Dr. Wilson and myself have felt a great responsibility in having been made accountable for the success of this section of the meeting. We have endeavored to procure only such as would do credit

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

to our society and the profession. Thanks to those who have contributed papers and those who are here ready to bring out the proper discussion of the same.

As to my address, I wish to be brief. In these brief remarks I hope to impress upon you our duty to the laymen in preventive medicine. All men are born with the same mental and physical characteristics, but we must recognize that the human brain presents from birth certain aptitudes. As a consequence, some are the more apt at gaining knowledge and developing a fertile brain, and in that proportion are they duty bound to lend assistance to their fellow-man. This obligation is applicable to all men in all walks of life.

When we enter the medical profession we take upon ourselves a more binding obligation—that of preventing and curing diseases. We are engaging ourselves together in a lifetime work for one common object of purpose. Quoting from our constitution the purpose of our organization is: "To extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members, and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of diseases, and in the prolonging and adding comfort to life."

Having assumed these obligations, we must of necessity feel the weight of them and should be made to realize whether or not we are fulfilling these obligations. To judge from the fruits of our labor, we must admit we are not doing our duty.

We have long since felt the special need of laws to protect our people from diseases and to care for those already afflicted. We have oftentimes felt the keen disappointment in not having such laws enacted. Our progress along this line has been inexcusably slow, and as a rule we place the blame on our legislators. It is in my mind questionable if we should do this. I am afraid the trouble lies in the people not being educated to the proper standard in hygiene and preventive medicine. When our legislators go forward to represent us, they go at the request of the voting people. They, as a rule, act in har-

mony with the majority of the people whom they represent. (Sometimes, perhaps, they act under undue influences for which the just are not responsible.)

If, then, it is a lack of educational work, each and every one of us should ask of ourselves individually and as a body: Are we fulfilling our obligations? I believe we should endeavor to have brought upon the Board of Education such influence as would prompt them to have a thorough course of hygiene taught in all the public schools throughout the State. Such course of instruction should be given by either a medical graduate or a graduated nurse.

Time will not permit of my going into detail in discussing the possible good that might result from such a course of instructions. Though I will say that in New York and Philadelphia the trained nurse has been a feature in the public school life for more than five years. The results have been most astonishing. In New York city the number of children excluded from schools for physical reasons is less than one per cent of the average recorded before the nurse entered the schools. Similar results have been recorded regarding cleanliness and the prevention of infectious and contagious diseases.

Could this be accomplished it would be one of the greatest advancements ever brought about through the influence of the medical profession in the State of Arkansas.

PROGRESS OF SURGERY.*

Arthur E. Sweatland, M. D., Little Rock,
Chairman of the Section on Surgery.

More than any other branch of the profession has surgery advanced in the last decade. The advancement of bacteriology, and with it antiseptics and asepsis, so that every organ and portion of the body can be invaded practically without danger to life, has been the great force impelling the onward march to what may now be termed in a great measure perfection in surgery. From the above statement I would not have it inferred that all surgery that is done reaches that high state.

It would seem to me that surgery, to reach perfection, must rest for its foundation upon an exact diagnosis of existing conditions, such diagnosis to be made with painstaking care,

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each point in the condition being given the most careful consideration.

I would not convey by this that we should be altogether conservative, as that term really implies, for in years gone by many lives have been lost to conservatism. On the other hand, I would not hand over to radicalism that which by more mature thought and consideration should be placed midway between conservative and radical and be called by a better name progressive.

There was a time in the history of surgery when conservatism was the great barrier to true progress. The progressive surgeon was compelled to fight him at every turn. The conservative was prone to continue treating conditions medically, with no possible chance of relief and cure, where surgery would give such relief. At this time it would seem that the progressive surgeon has won a victory over the conservative with his dilatory methods. However, he remains enough in evidence that I shall take this opportunity of reminding him of his shortcomings.

Many patients who have gall-stones are treated today for dyspepsia and intestinal disturbances. Breast tumors are neglected when 75 to 80 per cent are always malignant, and this when they are so located that they need not be overlooked. Pleurisy with effusion and empyema are being treated medically, or possibly with the aspirator. Appendicitis is being treated too often with a hot bag or a cold one until the best time for operation has passed. Enlarged prostates are being treated by conservatives with the catheter until complications have arisen, and to this day operation for removal has not been placed upon a proper footing for the very reason that conservatives have followed the course they have in the treatment of these patients. Malignant growths in any location are often treated by conservatives medically; for instance, when the growth cannot be seen or felt. Cancers of the stomach and pylorus are treated as dyspepsia and some functional disorder until the tumor becomes palpable and it is too late for successful surgery. The conservative tells the woman who has passed the menopause and comes to him with a bloody discharge, that it is a trifling matter, and prescribes a douche and a "Macaja's Wafer," thus depriving her of all her hope of future years.

Disease of the gall bladder, its duct, together with the hepatic and common ducts, are treated as digestive disturbances by the

conservative until the time for the greatest help from surgery has passed.

Unfortunately, we are still casting about in the dark for the cause of cancer, but it is certain that under conservative treatment the mortality is 100 per cent, while a certain per cent is saved when surgery is applied, if recognized and operated upon early. How anyone can treat such conditions conservatively is beyond comprehension. These examples are sins of omission, and, on the other hand, we must not neglect to call attention to the radical members of the profession. The former are not surgeons in the common acceptance of the term, while the latter is classed as such because he is always performing operations. I can do no better than quote from an article by James E. Moore, in a recent number of the *Journal of the American Medical Association*, along this line, namely:

"The radical is one who believes that operations are the whole of surgery and that any one who can secure primary union of wounds most of the time is a surgeon. His existence is due to the fact that our modern technic makes it possible to invade all parts of the body with immunity. He frequently performs unnecessary and unwarranted operations, and often when an operation is indicated fails to relieve the patient of his suffering, because his ignorance and inexperience prevent him from recognizing pathological conditions or relieving them when found. He classes every operation from which the patient recovers as successful, regardless of whether any good has been accomplished or not. Every surgeon is consulted by a host of people who have been advised to submit to all manner of operations for which there is no indication, and for which, very frequently, positive contra-indications exist. The radical, for want of surgical training and experience, as a rule does not perform radical operations. He is very apt to remove the stones from the gall bladder and leave those in the common duct. He removes the prominent part of a malignant growth, leaving the outlying parts and the neighboring lymphatic glands."

Midway between the two extremes of conservatism and radicalism lies the safe and ever-advancing plane of progressiveness. The progressive surgeon accepts the new methods, not because they are new, but because they are better for the patient and an improvement on the old. With painstaking care he works out each problem carefully and then plans his operation to meet the requirements. All of his ever-advancing knowledge of anatomy

and physiology, his diligence and time, are brought together to make each operative procedure of the greatest benefit to the patient.

Medical men are not perfect, but to the surgeon and the patient the greatest good must come from the scientific physician. His careful and conscientious study of each prospective surgical case is of the greatest concern to the surgeon, as well as the patient.

In the last ten years it is certain that about the last word has been said upon the proper handling of certain conditions, and that they are being cared for in an almost perfect manner.

Appendicitis, when treated in a progressive way, has practically no mortality! I wish once more to call attention to the necessity of early recognition of a diseased appendix and impress upon the physician the fact that with proper handling of these cases, even though means are not at hand for operation within the first twenty-four hours of the attack, less than one-half of one per cent need die. The absolute withholding of everything by mouth, washing out the stomach by gastric lavage, elevation of the bed, omitting enemas absolutely, the use of Murphy's method of installation, of salt solution or proctoclysis, will convert those cases which by other methods meant general peritonitis and death, into those of rapid convalescence, at the end of which time operation can be done with safety.

In the treatment of gall-stones and gall-bladder disease another advancement has been made. The discerning of the etiology of the formation of gall-stone has been a great step forward and is now fully established. While normally sterile the bile may become infected with various bacteria, and when such an accident has occurred a varying grade of cholecystitis results. There speedily follows a formation of cholesterin, and bilerubine-calcium results and the formation of stones of varying sizes is but a matter of time. It has been found that the typhoid bacillus may remain in the gall-bladder for years after an attack of that disease, and this organism, together with the bacillus coli communis, are the two germs most intimately associated with gall-stones, and these gain entrance either directly by ascending through the common duct, or indirectly through the portal vein. Here, again, in order that surgery may secure the best results, early recognition of the disease is necessary. How many times do we as surgeons find that operation has been deferred until suppuration, adhesions and fistula have taken place with all their dire results? In

the last few years it has been clearly demonstrated that we must not wait for attacks of gall-stone, colic and jaundice to diagnose disease of the gall-bladder and biliary ducts, for if we do we will miss the great majority of such cases. The symptoms which will most constantly lead to the diagnosis of gall-stones and gall-bladder disease are not gall-stone colic, jaundice and the passage of stones in the feces, as we were at one time taught, but digestive disturbances, a feeling of weight and burning in the region of the stomach after eating, and a gaseous distention of the abdomen. A dull pain extending to the right of the epigastric region around the right side, about at a level of the tenth rib, passing to a point near the spine and then upward to the right shoulder blade. A point of tenderness between the ninth costal cartilage and the umbilicus. A history of having had one or more attacks of typhoid fever or appendicitis, a slight tinge of yellow in the skin; especially is this so on the days the patient complains of not feeling well. Sometimes there is a swelling of variable size opposite the end of the ninth rib.

Such has been the progress with reference to disease of the gall-bladder and bile ducts in the past ten years. Complications which later would be present are avoided, and the operation has been rendered more simple and safe. Any surgeon at the present time who diagnoses this condition early and possesses a thorough knowledge of the region can relieve his patient.

In the past ten years the indiscriminate spaying of women, which constitutes a blotch upon the history of surgery as recently as ten years ago, has been generally condemned by the conscientious, progressive surgeon, and the woman who must be operated upon may sleep the night before the operation secure in the knowledge that no part of her ovaries, save that entirely destroyed by disease, will be purloined. Catheterization of the ureters has largely been discontinued, which is not more than could be expected by reason of imminent danger of infection of the kidney.

The vaginal route has taken the place in a large measure of the abdominal hysterectomy; vaginal incision and drainage of pus tubes has also replaced oöphorectomy. The day is also here when the progressive gynecologist has ceased to fold the broad ligament or loop the round for every uterine displacement. Uteri with displacement uncomplicated are not having their ligaments shortened or being ventrally fixed, and no less an authority

than Dr. Howard Kelly has said that "No retrodeviation of the uterus, *per se*, outside of pregnancy, demands any treatment. Curetage of the uterus is out of date, except for diagnostic purposes, and this is questionable."

Early removal of the uterus when malignancy exists holds the same as ten years ago. Opinion favors the removal of tumors of the ovary and fibroids that would be obstructive to the pregnant woman during pregnancy.

Dysmenorrhœa and leucorrhœa are two things, I believe, that have been practically taken out of surgery and now properly fall and are successfully treated under the head of medicine. Probably no case of dysmenorrhœa was ever cured with the dilator, knife or cautery, and no leucorrhœa was ever induced to cease its flow by means of the curette.

In preparatory treatment of surgical cases much has been accomplished in the way of placing the patient as near the normal as possible. When the surgeon removes gallstones or the various tumors, gastric and duodenal ulcers, or even the appendix, he must necessarily recognize that these are expressions of a disturbance that allowed them to be produced, and I cannot at this time refrain from asserting that it is necessary, after removing these symptoms by surgery, to afterward relieve and cure the underlying condition which produced them.

ADDRESS OF CHAIRMAN OF THE SECTION ON OBSTETRICS AND GYNECOLOGY.*

C. S. Pettus, M. D., El Dorado.

I can but realize the importance of this section, and my better sensibilities are aroused to their utmost in attempting to address you as your chairman.

Should I fail to appreciate the responsibility of my office, carrying with it the duty of giving the proper consideration to the many things coming up by which a great good can be done and much learned of the development of human souls, their arrival to Mother Earth, and if they be females the special care of their organs, I would be wholly unworthy of the honor; I can but acknowledge that these are the things that blazon the pathway to the enlightened world of

science, and I emphatically repeat, should I fail to appreciate this I would be a disgrace to organized medicine.

The section of our medical society which is now in session carries civilization, population and citizenship, and upon it depends every other section.

Obstetrics teaches the development of human beings from a fecundated ovum, and gynecology teaches the modes of investigating, treating and caring for the reproductive organs of the female. I will not enter into a classical discussion of the origin of these words, their teaching, and various modes of treatment in the different lines.

I will speak of those things which are most practical, and upon which depends the health, well-being and happiness of humanity.

It is a source of pleasure and joy to address this section, as it is woman, who is the foundation of it.

If I were standing upon the ruins of Prytheneum and had to speak whence Demosthenes spoke, my tongue would refuse to obey, my words would die away upon my lips, and I would listen to the winds fraught with the dreadful realization of his unheeded prophecies concerning justice, kindness and protection. With my head bowed down in humility, I ask the question: Do women get at our hands those things? Methinks the echo answers, and every conscientious doctor's heart under the sound of my voice throbs back the answer of the echo, and I dare say we are reminded of the time when from the lack of interest in giving advice, the infection of some good woman by her husband, or of a time when we permitted some young woman to undergo the operation of having her reproductive organs removed, when just a little further investigation, and more interest as to her condition, and more consideration as to the outcome of such an operation, would have saved so much suffering.

My tongue is silenced with an unspeakable realization of our neglect of their protection. The justice of my cause is my eloquence, but misfortune may approach the altar whenever the flame is aroused, and a false conception of my meaning be interpreted by some present.

All honest men grieve to see a lack of virtue among our women, and it is our duty to reach down and, if possible, pull them from the miserable land of degradation. It is a duty, also, while demanding of woman that she be virtuous, to tell man the price she often pays for his vices, and let us insist on

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his virtue, if married, for the protection of his wife; if single, for the protection of the woman he expects to make his wife.

My life's work shall be in this line, and I expect some day to claim my professional share of the benefits of the laws of nature, and of nature's God, and look with a degree of happiness upon those that I can credit myself with having saved much suffering and unhappiness by taking the interest in them that they deserve at my hands as their doctor, and by taking the time to advise them properly.

I may not add anything to the scientific reputation of this society, but I dare not sully it by refusing to speak boldly of those things which most bear upon my mind. I purpose but one thing in speaking as I do, and that is to impress upon you our duty to protect woman in every possible way at our hand. In doing this we not only aid humanity, but we aid our country as well.

I fear that our country suffers much today, from the standpoint of population, as a result of the crusade of removing ovaries and wombs a few years ago, and we should feel thankful that another like era will never come. Had it continued for a while longer, this section would have been only the section of gynecology; obstetrics from necessity would have been relegated to the professional curiosity shop.

Our profession is not one of experiment, and the hand of Providence has guided the footsteps of fellow-workers back to the golden gate of reason. Seeing what was being done stimulated their better judgment, and today few such mistakes are made by our best gynecologists.

In this we revel, and each year in larger and larger letters is written upon the book of conscience, which registers our duty, this one rule: Better protection to women.

The advancement made along this particular line is most pleasing, and each thought advanced by which better protection to women is offered means much to our country.

You cannot be too forcibly impressed with the bearing these things have on our nation, not only in population, but in everything in which our country is interested.

We should do more to arouse the interest of our country in this particular line; it is even of more importance than the war waged on tuberculosis, for without the birth of children there are no subjects for the white plague. Education on this line offers some aid in continuing the war.

Considering the great benefits derived from the proper use of scientific measures, it is indeed appalling to see the little interest manifested in them when we know they offer the greatest possible protection to life, health and happiness.

Our republic is great and has already taken its place among the great powers of the earth; it is great in extent, great in population, great in the activity and enterprise of her people; it is the richest nation in the world. Even our own State is rich, and squanders its wealth in paying enormous debts, heavy taxation, and is annually plundered of immense sums by men who seek public station for their individual profit. If a tenth part of what is every year misappropriated from us in this way in this State in which we live under the pretense of public service, poured profusely into the coffers of political rogues, were expended for scientific purposes, we might have deposited in elegant buildings, hospitals and laboratories, places where disease could be scientifically treated, and in many instances lengthening the life of individuals, stationing upon the ocean of life, lighthouses, the illumination of which protects us from the otherwise unseen rocks. I speak of science advisedly, and I readily say in speaking as I have I do not leave my subject, because obstetrics and gynecology are the fountain-head of scientific medicine.

I have previously said the advancement is pleasing, but I may also say there is room for improvement.

The human mind cannot content itself with the present. It is ever journeying through the trodden regions of the past, or making adventurous excursions into the mysterious realms of the future, and as I look upon the present I can but say we have done much, and, turning my head to gaze back into the past, I throw up my hands with horror, and as I behold the multitude of women I can but think how miserable must some of those feel who did those awful operations, many times merely speculative, of removing reproductive organs, to see the damage they have done. In my imagination I look into the future; the pathway is lighted up with truth demanding justice, and the man who fails in every particular to prevent infection of women, or fails to do everything in his power to save her, her reproductive organs, will be stamped a quack and an imposter.

I predict the day when her organs will be guarded by our profession as the mother

guards the babe, and only in very extreme cases will they be removed.

I pull my hat off to the gynecologist, and I acknowledge his work has been great. His researches and investigations have been worth much to suffering women, and many today are grateful to him for the relief he has given. We all acknowledge his good, and that if the good we do for humanity here on earth gives to us a passport through the pearly gates to the golden street, all conscientious gynecologists will rest in the bosom of Abraham.

Did you think me base enough to consider my address complete without the mention of the pregnant woman? The place she deserves in our profession is the most important, and she should be guarded and watched as tenderly as a flower, and be looked upon as living the most important part of her life. We should impress upon her husband the consideration which is due her and that her surroundings should be in every respect as near perfect as possible. Her secretions, digestion and eliminations should be watched. And then our duty at the lying-in period, during labor, we cannot be too careful and considerate of her; and the baby's eyes must not be neglected.

What is more beautiful than the mother and her babe, a picture of love and sacrifice, and the noblest type of womanhood?

Were I a painter, with my brush I would place upon my canvas a mother leaning over the bed of her infant, bringing out the beautiful form of the infant and its graceful movements, demonstrating with the mother and child in their general demeanor, purity and innocence so forcibly that all who looked upon it could not help but be impressed by it and read its meaning. I would have the mother's eyes express the grandest and noblest love, love known only by a mother. I would label my picture "Love."

SYPHILIS.*

G. M. D. Cantrell, M. D.
Little Rock.

The importance of the many difficult and complex questions which this study involves brings it forcibly to our attention that none other is of more practical interest. To treat syphilis is to attack the disease as a whole, recognizing local manifestations, but treat the

patient against the future. Safeguard not only himself, but his posterity. With our advice we should make the patient understand what syphilis is, and what the treatment must be. Our efforts properly directed are often crowned with success.

Syphilis successfully handled should be considered from a special point of view. Treating syphilis not only embodies its lesions, but the disease in its complex form.

First. Is it necessary to treat syphilis?

Common sense and clinical experience, without entering into detail, I think, will refute any argument to the contrary. We all should know the result when abandoned to its own evolution. At first, though not grave, later on it becomes serious, terminating in teratism, and even death.

Is it necessary to treat every case of syphilis?

I would answer, whether mild or severe, we are dealing with syphilis and we cannot foresee what this or that case of syphilis will be after a period of some years. Then, from clinical experience in safeguarding the health of our patient and his posterity, I would say, recognize all syphilis as syphilis, and let your treatment be pushed in each particular case according to the indication it presents. It is necessary to treat it, and it is necessary to treat it whatever it may be at the outset, in its benign forms as well as in the medium or severe.

Is there an abortive treatment for syphilis?

Such methods have been proposed and tried, but still it has been found that the pathogenic germ of syphilis remains active, and constitutional symptoms always follow abortive treatment, that is, if syphilis; and this brings us to the diagnosis of syphilis.

There are few men, if any, who can establish the diagnosis of a syphilitic chancre, in its early stage, in all cases applying to us for treatment. Fournier says: "For my part, I confess that I am unable to establish the diagnosis of a syphilitic chancre in its early stages. If there are physicians who are skillful enough to solve such a problem, I am ready to begin again with them my syphilitic education." This is surely a strong and bold speech from so worthy a member of our profession. I admit I do not hold the skill to make the diagnosis of syphilis at first, at all times, and from the many different sores that to me have been presented. The first step then is to make your diagnosis clear, and when you know your patient has syphilis, begin your treatment. Since asked by the society

*Read before Pulaski County Medical Society.

some months ago to prepare a paper upon this subject, it has been my pleasure to study several sores characteristic in symptoms of syphilis, by the microscope, in search of the spirochæte, first making a diagnosis of syphilis from the history of the case and the clinical appearance of the sore; and with these cases the spirochæte being shown by Dr. Bledsoe, I proceeded at once to begin treatment. This is a new era to me in the treatment of syphilis, as I have always held to the opinion, do not begin treatment before you have some other symptom corroborating that of the sore and personal history. With these cases and my diagnosis proven by Dr. Bledsoe's test under the microscope, the spirochæte now proven and the accepted germ of this disease, I no longer wait for secondary symptoms to present themselves. I have said, when you make a diagnosis of syphilis then is your time to begin treatment. Don't wait another day. The idea and teachings of the past, that no harm is done allowing the disease to go to a period of ripening, that is, secondary manifestations, is now wrong.

Schaudinn in 1905 described the spirochæte pallida as the probable cause of syphilis, and since then there is but little question of its correctness. It is being conceded, and now bears the same relation to syphilis as the tubercle bacillus does to tuberculosis, and the gonococcus to gonorrhœa. The spirochæte should now be regarded as essential for a diagnosis, especially in the primary stage. It is found only in syphilis, never in nonsyphilitic lesions, and found in the lesions of every stage of syphilis.

Syphilitic material containing spirochæte inoculated into monkeys, and the spirochæte demonstrated in the lesions thus producing material from these lesions, produced the disease in a second series of monkeys, and on for forty successive inoculations, all the lesions showing the spirochæte.

(Note—From an article by Frederick G. Harris, M. D., and B. C. Corbus, M. D., of Chicago. A personal communication from E. Finger. *Arkansas Medical Journal*, December 5, 1908.)

The strength of such diagnostic evidence and so amply proved certainly removes doubt as to the real cause of syphilis, and we have much to congratulate ourselves on the progress of pathologic study.

The sooner you attack the disease, the sooner you gain control: and, as I understand syphilis, the shorter will be your period of active treatment. I believe that every day this toxin

is allowed to invade a wider field of tissue; just in proportion will it have engrafted itself with deeper rooting upon the subject and call for a longer time of treatment before you cure your patient of the disease. To cure syphilis you must eradicate and remove this germ, and to do this you must kill it. Experience has taught me in my treatment of syphilis, the earlier we make a diagnosis and begin treatment, the more readily the disease yields to antisymphilitic measures. Then to follow up our investigations, it behooves us not to delay our diagnosis, and with the sore and the microscope we should, if possible, classify it, and if the spirochæte is shown, then we should delay no longer. The spirochæte to me proves beyond doubt the infection to be specific, and if shown, your diagnosis is made.

Sufficiently expert and conscientious investigation, therefore, reveals spirochæte pallida in fully three-fourths of the smears taken from chancres, moist papules and mouth lesions. Aspiration of the lymph nodes adjacent to the chancre does not give reliable results. The microorganism is rare in the center of nodules, chiefly confined to the periphery, best found in the chancre itself. In the later secondary lesions the spirochæte have been found as late as several years after the chancre. They have been found in the pus from a nonspecific abscess occurring during the acute stage of the disease. In the serum of blisters, in albuminous urine, in the blood during the first few months, and before the beginning of mercurial treatment. The spirochæte in tertiary lesions have been found in gumma after long search spent in examining smears. The moist lesions of early hereditary syphilis swarm with spirochæte. Practically all the organs of still-born syphilitic infants show the spirochæte, and more numerous in the liver, lungs and skin. They have been found in both fetal and maternal placenta.

Your diagnosis made and ready to begin treatment, at whatever stage it may be, primary or secondary manifestations, what is your treatment?

From the teachings of the best authorities on this subject and my own experience, I am free to admit that there is but one agent from which to expect the best results and the most good to your patient. Here you must have the confidence of your patient implicitly, and you must go into detail with him explaining the disease, of its different stages, and that your aim, with his help, will be to prevent any further symptoms of the disease developing. Hold it at its primary stage if

possible, and if secondary, arrest it as soon as you can; that herein lies the success of his future protection and happiness. This agent of treatment is mercury, and I prefer, if possible, to administer the treatment by the mouth. The majority of patients who are naturally healthy respond very nicely to internal treatment. And it is the exception when inunctions and hypodermics of mercury are to be resorted to, and conditions sometimes with some patients call for mixed treatment in the secondary stage.

Beginning treatment in the primary or secondary stage, I rarely make use of but the one drug, mercury. I prefer the green iodid, as it is best tolerated and less irritating to the mucous membrane of the alimentary canal. It is your best agent for gradual increase of the dose, bringing the patient to the point of tolerance. Every patient is a law unto himself, and rarely any two patients take the same dose of mercury to establish a maximum dose. Once establish a maximum dose, then you know well your relations to this individual person. The Garnier and Lemaurex pill—French make—serves me best. It is with this pill the Keys treatment was established years ago, and I hardly think there has yet been much improvement upon this plan of treatment when carried out faithfully and with the patient's help. When Keys first established this plan of treatment, syphilographers advised you to wait for secondary symptoms to confirm your diagnosis. With the advances of the present day we are not called upon to wait; it's our duty to the patient to make, with the microscope, an early diagnosis from the primary lesions, and when the spirochæte does show itself, then lose no time in bringing your patient under mercury and prevent, if possible, the appearance of secondary symptoms.

By the earliest treatment prevent as much as possible systematic invasion, the local lesion naturally abounding in the greatest number of spirochæte. It is now suggested we excise the chancre when possible, and if not, then cauterize deeply, and with such treatment we may yet rob the disease of its so-called parasymphilides. This being a most logical therapy, the removal of the known source of absorption, with antisymphilic treatment immediately begun and destruction to any organism progressed beyond the local focus.

With mixed infection I have had but little experience in making the diagnosis based upon the presence of the spirochæte.

Now, regarding the treatment of syphilis, since it cannot be aborted and mercury is our sheet anchor, we must not forget to study the treatment suitable to each stage of the disease and to each morbid manifestation. The treatment of syphilis does not consist only in the administration of remedies that have proved by experience to be the most useful for the cure of specific symptoms or lesions. It embraces all the indications which are necessary to relieve and cure a patient affected with syphilis. Therefore I say that each case is a law unto itself. Frequently patients of syphilis manifest and show other pathological individuality. Whatever the complicating conditions, meet them with suitable treatment. The treatment of syphilis properly understood, as Fournier classes it, would be specific agents, auxiliary medication and hygiene, specific agents acting directly on the disease. Auxiliary medication to modify pathological dispositions which may coexist with syphilis. Hygiene applied to the individual conditions of the patient. It is the combination of agents in which we expect best results, treating syphilis as a whole in all of its complexity.

Now, for primary and secondary syphilis uncomplicated, we feel quite sure of curative results when we place each patient in a list to himself and apply our remedy, gradually bringing each one to his maximum dose of mercury, and once this is established I feel myself master of the situation. Of course, there will be failure with some. You will find it a hard matter to hold every case to obedience and control in following directions. And again, just here I may refer again to auxiliary medication modifying pathological dispositions which may exist, and here your knowledge of this disease and its treatment will serve you well.

Remember, mercury is a curative agent and exhibits its influence on syphilis as a whole and on its future. And if you can make your diagnosis early and in its primary stage, you can then show by comparison the advantages to your patient, and the relief of secondary manifestations which often are compromising, as well as troublesome.

The early administration of mercury not only modifies, attenuates and neutralizes, but prevents future manifestations. As I have said, I prefer the method by ingestion as the best way of giving the drug. Yet, every case will not be alike, and your choice of treatment should be based on clinical indications relative to the peculiarities of the patient and

the quality of the disease. You can administer treatment by ingestion, inunction, hypodermic injections, and by fumigation.

Of the two great remedies in the treatment of syphilis we have spoken first of mercury. And the next to be considered is iodid of potash. As early as 1836 Wallace, of Dublin, gave the first results of his use of the drug. Ricord then adopted and recognized its more particular application to syphilitic lesions of the tertiary type.

Ricord by his experiments and teachings and by his authority rendered this remedy popular, and since then it has remained undisputed. Iodid has a most powerful antisymphilitic action when administered in tertiary lesions. It alleviates and disperses certain painful phenomena, specific neuralgias and pain of exostosis. It resolves gummatous syphilomata, especially of the palate and pharynx, exostosis, hyperostosis, tertiary lesions of the tongue, muscular and visceral infiltrations. In tertiary forms iodid can do more than any other remedy. It resolves tumors of large to smaller size. And iodid can do this at any stage of syphilis and remote from the beginning of the disease. Iodid is a perfect remedy, properly prescribed, in syphilis. The symptoms of iodism, another side to the picture, calls for our consideration and behooves us to know, because such symptoms may lead to error in diagnosis.

With the two remedies it must be remembered that each has its place, and syphilis in its early stages is curable without the help of iodid. But as an auxiliary remedy in primary and secondary syphilis, iodid has its place. Mercury is most suitable in the early stages. Iodid for the tertiary lesions. Yet there are exceptions when iodid will influence and relieve secondary neuralgic pains, periostitis, ostralgia, arthralgia, myosalgia.

Early malignant syphilis characterized by gummatous infiltration and ulceration. The benefit of iodid in such cases is due to the fact that early malignant syphilis is only tertiary syphilis which has succeeded the chancre without a secondary period. Mercury in the tertiary forms occupies an important place. Mercury is an antisymphilitic at every period of the disease. The association of the two antisymphilitics, mercury and iodid, is what is called mixed treatment. Iodid sometimes in tertiary forms has its failures, and in such failures the addition of mercury yields assistance. Iodid in some cases is powerless without the assistance of mercury. Iodid should cure sarcocele, but it does not always, and then with

mixed treatment you are successful. Mercury is more to be depended upon than iodin to prevent recurrences and safeguard the future. Iodid erases tertiary lesions, but does not cure as mercury does. When best applied, mercury and iodin mutually reinforce one another. In certain manifestations this disease reacts better to the mixed treatment than to either of these remedies singly, and is in some cases indispensable. For instance, for the dry tubercular syphilid the mixed treatment is indicated; neither remedy singly will give as quick and positive results.

In the unclassified lesions which occupy the borderland, that is, between the secondary and tertiary periods, your mixed treatment yields you best results. In conditions threatening the life of an organ, or individual, mixed treatment is a necessity. In cerebral syphilis mixed treatment is imperative.

When does syphilis cease to be infectious?

This is no easy question answered. As considered by Keys in his work of 1908, he tells us eight out of ten syphilitics cease to be infectious within three years; ninety-nine out of one hundred cease to be infectious within four years. The proportion of infections from syphilis of more than five years is many. The infection of a five-year-old syphilis infects just as virulently as a fresh case. To effect a cure of syphilis, then, the last spirochæte of a given patient must be dead, and the question now of much interest to the profession and to the patient is when this point and means of determining is established beyond question and dispute.

THE PAUCITY OF ATTENDANCE.*

Thomas W. Hurley, M. D.
Bentonville.

Though having been unable to enter into the active duties of the profession for several years, I yet feel it a duty incumbent upon me to do what I can for its elevation and advancement.

In the remarks that may follow, and they shall be short, I wish to impress it upon your memories that our by-laws call for a monthly meeting of the society. Do you attend? Are you responsible either from indifference or nonattendance for the great paucity of both at our monthly meetings?

In speaking of powers and duties, chapter 2, section 1, speaks thus:

*Read before Benton County Medical Society, June 8, 1909.

"This society shall have general direction of the affairs of the medical profession of the county, and its influence shall be constantly exerted to better scientific, material and social conditions of every physician within its jurisdiction. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every reputable physician in the county."

What are you going to do about it? Are you going to observe its requirements, or are you going to continue the neglect of its observance in the future, as you have so frequently done in the past?

I think the thing we most need for the medical profession is to have a higher regard for professional courtesy and medical ethics, and this will be easy to bring about with an honorable, educated profession. A man with an honorable mind is capable of looking at conditions without any personal or selfish motives. There is no other profession in which the golden rule is more binding than it is in the medical profession, and none in which it is easier to break it. Pomposity, vanity and self-praise have been the cause of many violations of medical ethics and professional courtesy.

When a few individuals become interested in any particular subject they form a society in order to facilitate their further study of the questions pertaining to the subject. So it is with medical men and their societies. The first medical society in America was organized in Philadelphia in 1766. Since that time the science of medicine has been made to progress, more or less irregularly, down to

the present. But the existence of medical societies today has become entirely too perfunctory. They lack the life and interest of a living thing. A society well conducted becomes a substitute for the post-graduate course of many physicians. Papers will usually occupy the greater part of the time of a given meeting, but clinics should be arranged for, whenever it is possible. Societies held in the larger towns can nearly always avail themselves of the advantage of a half day set aside for clinics. One case examined and thoroughly demonstrated is worth a dozen papers. This is a matter that all of our medical societies should take up. Clinical teaching is the ideal method for the practitioner, and if this feature should be worked up the strong interest wished for would be soon re-established in medical societies.

In closing this short epistle I know of no way in which I can so well hope to awaken an interest in you about the subject discussed than to quote, for your benefit, from one of the greatest medical authorities that ever lived in the world, at least up to the date of his death. That man was Dr. Thomas Watson, of London, England. In closing an introductory lecture he used this language:

"And even when you have made it, as you may, the means of continual self-improvement, and the channel of health and ease to those around you, let not the influence you will thus obtain beget an unbecoming spirit of presumption; but remember that in your most successful efforts you are but the honored instruments of a superior power—that, after all, it is God who healeth our diseases and redeemeth our life from destruction."

THE JOURNAL

OF THE

Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council monthly.

Edited by

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

CONSOLIDATION OF OUR MEDICAL COLLEGES.

The council, which is the judicial body of the State Medical Society, saw fit to indorse a resolution and offer it to the House of Delegates at the Pine Bluff meeting, which was adopted.

RESOLUTION.

Deeming it detrimental to the best interests of the society to have two medical colleges in operation in the state, desires that a committee be appointed to devise ways and means whereby the consolidation of them may be affected, that the best interests of the medical profession of Arkansas be conserved. That the committee consist of ten members, one from each councilor district, to formulate a plan of combination of interests, looking to the consolidation of the two schools, and report at the next session of this society.

This committee is as follows: Drs. J. L. Burns, Jonesboro; H. O. Walker, Newport; H. H. Rightor, Helena; C. S. Pettus, El Dorado; W. S. Stewart, Pine Bluff; R. H. T. Mann, Texarkana; J. C. Wallis, Arkadelphia; George S. Brown, Conway; L. Kirby, Harrison; Frank B. Young, Springdale.

Dr. Joseph T. Clegg, our retiring president, has used care and good judgment in his selection of this committee, and it is to be hoped that they will go to work at once.

The consolidation should be brought about; this is an era of uniting of forces. Five medical colleges were merged into one at Louisville, Ky., two at Cincinnati. The two at Keokuk, Ia., have turned over their property and good will to the Medical Department of the Drake University at Des Moines. The Medical Department of the University of Southern California has united with the Medical Department of the State University.

From the report of the Council on Medical Education (Journal American Medical Association, June 19, 1909), we find that five years ago there were 166 medical colleges in the United States. Since which time twenty-five others have been organized, but forty-three were closed, leaving 148 at present. Of those closed, sixteen became extinct, the remainder merged with others.

We also find eleven medical colleges that require two or more years of work in a college of liberal arts for admission.

Eighteen more have definitely announced the above requirements after 1910.

Twenty-one either already require one year of work in a college of liberal arts, in addition to a four years' high school course, or have announced their intention to do so, on or before 1910.

Six state examining boards have established higher requirements of preliminary education, from one to two years in a college of liberal arts. Several other states are contemplating a similar increase in their requirements.

Some of the medical schools are now publishing in their catalogs a list of colleges recognized by them for advanced standing. The Medical Department of Tulane University of Louisiana has such, but it does not contain the name of either of our medical colleges.

The time has come for us to wake up, lay aside our petty jealousy and prejudice, and form one good, up-to-date medical college. There is no good reason why Arkansas should not have as efficient a medical college as any state in the Union. We have the ability and the facilities, if we can only combine them.

There are between 450 and 500 medical students residing in Arkansas, but less than half of them are going to our schools. Why is this?

Because our schools have not the indorsement of the profession of the state, and the

profession has sounded the warning through the state society by adopting the above resolution.

STREET VENDERS.

Drs. T. F. Hudson and S. O. Lowery.

A committee to investigate and report to the Mississippi County Society on the patent medicine venders at Blytheville tell the same old story. Spielers and musicians, forming a combination with some local druggist, who, for the sake of a few dollars, will assist in fleecing his patrons and discrediting of the physicians of his town.

It seems this crowd sold a patent, or, as they claimed, a proprietary; also carried a Dr. A. S. McCrary, who had patients come to his office and also made visits. He was registered, so the local physicians were unable to convict him.

Under our new law, which goes into effect July 6, all such physicians as the above can be controlled by the State Board of Examiners, and it is the duty of every county society to report all so-called physicians of this kind to the secretary of the board at once.

As to the best method of dealing with street venders, our opinion is for the local physician to take an active interest in his municipal affairs and see that your city government passes such ordinances that will control them.

RESOLUTIONS TO AMEND THE BY-LAWS.

The following resolutions introduced by the Council were read in the House of Delegates, and under the law will lay over until the next annual meeting, at which time they will come up for consideration:

AMENDMENT NO. 1.

Whereas, It is well to carefully guard the interests of this society; therefore, be it

Resolved, That the words, "the secretary shall give bond in the sum of \$1,000.00." be added in the beginning of section 4 of chapter 6 of the by-laws; and, further, be it

Resolved, That section 7 be added to chapter 7 as follows:

"Sec. 7. The Council shall have authority to accept or reject all bonds."

AMENDMENT NO. 2.

Whereas, Injustice may be done some county societies by the failure of their dele-

gate or alternate to attend the State meeting; therefore, be it

Resolved, That the following addition be made to chapter 7:

"Sec. 6. In case of a vacancy in the office of delegate, the council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office."

AMENDMENT NO. 3.

Dr. Young introduced the following as recommended by the council:

Whereas, It seems that the cause of medical organization can be forwarded thereby, therefore, be it

Resolved, That the words "who is a graduate of a reputable medical college" be struck from section 5 of chapter 9 of the by-laws.

Department of Dermatology.

By William R. Bathurst, M. D., Little Rock.

Owing to the remarkable prevalence of this class of affections, among all classes of humanity, the editor decided that it might be of interest for me to furnish, occasionally, a page of practical points on skin diseases. The task of compressing much in this small space will be considerable, and I recognize well how imperfectly it may be done, but if I succeed in aiding any of you in the diagnosis and practical management of cases of this character I shall be fully satisfied. It is noteworthy to mention a few diseases most frequent during the summer months, as—

Pompholyx.—An eruption of the hands and sometimes the feet of adults, characterized by the appearance of deep-seated vesicles, usually about the size of a pinhead, which look not unlike cooked grains of tapioca. The sites of the disease are the palms and lateral aspects of the fingers, as well as the toes and soles of the feet. The subjective symptoms are burning, slight itching, particularly at the beginning of new lesions, and at times a feeling of tension. The smaller lesions show no tendency to rupture and finally become absorbed; the epidermis exfoliates and there is left a slight reddened area. There is no apparent constitutional disturbance. This disease, I believe, is due to some disturbance of the sweat glands of neurotic origin. It is frequently accompanied by hyperidrosis. In this connection I wish to say that Unna has

described a bacillus situated chiefly about the roof of the vesicle, and in the exudation. This bacillus flourishes readily in sweat, and occurs in large numbers in conditions of hyperidrosis. Pompholyx may be confounded with acute eczema, but in this latter disease the lesions are smaller and in greater numbers, crowded together with considerable inflammatory action; tending to rupture spontaneously and accompanied by a greater amount of itching. Scabies bears a close resemblance to pompholyx, but it can be readily differentiated by finding the burrow and noting the location of the eruption, the anterior face of the wrist, the breast of women, the genitals in males, and about the umbilicus in both sexes. Pompholyx has never been reported in infants. The immediate attacks of pompholyx are always curable, but the tendency of other attacks at the beginning of warm weather is difficult to overcome.

Treatment.—Systematically, remedies of a tonic character like iron, arsenic, strychnin and quinin, with nutritious food, is indicated. Locally, puncture the large vesicles, allowing the escape of the serum and apply a soothing and somewhat astringent wash. This will shorten the duration and give almost instant relief. The zinc-calamin lotion, or lead-water and laudanum, are recommended. After the acuteness has subsided it is well to apply a salve like Lassar's paste, with the addition of 2 to 4 per cent salicylic acid; or a freshly prepared diachylon ointment may be used.

Tinea Versicolor.—These little fawn-colored patches, common on the chest, are sharply defined, various shapes, slightly scaly, and sometimes a little irritating. In warm weather, and in those who sweat profusely, it is not an uncommon thing to see the eruption present a pinkish hue, due to the hyperemia of the skin. Do not mistake them for a seborrheic condition or secondary syphilides; the microscope will settle this point at once. Place a few scrapings from a patch upon a slide, add a drop or two of liquor potassa, tease out the scrapings a little and put on the cover glass, and this even with the low power will show the spores of microsporon furfur like a cluster of grapes in a network of branching tubes, and can be mistaken for nothing else.

Urticaria.—The wheals appear suddenly and disappear in an equally rapid manner; a patient may have nothing to show on examination. By scratching the body with a blunt instrument or the rough edge of a coin will in a few minutes bring out the charac-

teristic wheals. There is always a cause for urticaria. It may be due to articles of diet, such as strawberries, shellfish or tainted meats, to drugs as antipyrin and quinin and disorders of the alimentary canal.

Intertrigo or Chafing.—Remember that ordinary intertrigo is an erythema, and the fluid excreted from it does not stiffen linen, as in eczema. Intertrigo is met with where any folds of the skin are in contact, as in the arm-pits, bends of the arms, back of knees, groin, perineum, breast of women, the buttocks and groins of babies. Treatment consists in washing night and morning with soap and water. The best applications are lotions and dusting powders. Ointments frequently aggravate. Of the lotions I recommend zinc-calamin, with 2 per cent resorcin, and the following dusting powder containing Pulv. ac. borie 5i, Pulv. zinc oxide 5ij, Pulv. amyli 5v, has been of good service.

Protection to the Unborn

AT THE DOCTOR'S DOOR.

I can't say jest exactly, but it's twenty years or more,
When Mary and her Elsie knocked at the doctor's door,
For two months she'd been widowed, all worn and pale and poor,
Elsie, all she had or wanted now, so she knocked on doctor's door.

She told a bitter story, "how as Jim had gone to rest,
How 'twould work a hardship surely with another at her breast."
An' she wept an' patted nervously the sweet child's curly head,
An' "wondered how she'd make it now that poor ol' Jim was dead."

The doctor smiled and called the child an' set her on his knee,
An' a keen knife blade was in his hand, an' he held it up to see.
"Now, Mary, here is four of us, for you are two, you see;
Suppose I jest kill Elsie an' save us other three."

She didn't need no further talk, but thanked ol' doc' an' went,
An' the smiles an' tears she give him paid the bill to every cent.
* * * * *
That young rooster workin' there—he built that pretty home,
An' he's game in business circles from claw-tip to his comb.

He supports the widow Mary—well, he's the onliest one
That's left now, since Elsie died, that's Jim, poor Mary's son.
Mary's blind now, but she's happy, an' it's twenty year or more
Since Elsie died an' Jim come in, with that doctor at the door.

—James Cabell Minor.

Proceedings of American Medical Association

ABSTRACT OF THE PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION, SIXTIETH ANNUAL SESSION, ATLANTIC CITY, N. J., JUNE 7-11, 1909.

The Journal A. M. A., June 19, gives in full the proceedings of the House of Delegates at the recent Atlantic City session. The House of Delegates met in the Solarium of the Traymore Hotel on Monday morning, June 7, at 10:30, and was called to order by the first vice president, Thomas J. Murray, of Montana, who announced that the president, Dr. Herbert L. Burrell, of Boston, was not able to be present on account of illness. After the report of the Committee on Credentials and the roll call, the president's address was read, in which a number of matters regarding the organization and conduct of the Association were discussed. Regarding the proposition to increase the membership of the Board of Trustees, President Burrell was of the opinion that it was unwise, as a larger body would be less disposed to conservatism, and he held that there should be a distinctly conservative body in the Association. In the way of positive recommendations, he discussed the various boards and committees of the Association and their work, recommending that the president and president-elect be invited to be present at all meetings of the Board of Trustees, that the work of all committees, as well as the policies pursued by them, should be subject to the approval of the trustees, and that all defined policies of all committees, boards and sections of the Association be approved by the trustees before being published. He furthermore recommended that the Board of Trustees be requested to report to the House of Delegates at the next annual session their opinion as to the wisdom of separating the offices of editor and general manager and secretary of the Association. The address, with its recommendations, was referred to the Reference Committee on Reports of Officers.

Following the appointment of the Reference Committees, the report of the general secretary was presented, showing that the membership of the American Medical Association on May 1, 1908, was 31,343, and on May 1, 1909, was 33,935. The losses during the past year have been as follows: Died, 290; resigned, 1,439; dropped for non-payment of dues, 484; dropped as not eligible, 290; names removed, not found by the Postoffice Department, 55; total, 2,558. The new members for the year have amounted to 5,150, making a net gain of 2,592. After announcing the interim committees appointed by the president and commenting on several features of the Association work, the general secretary presented a review of the work of the last ten years, during which time he has served the Association as general secretary. A comparison of present conditions with those existing in 1899 shows that ten years ago the membership of the Association was 7,997. The membership today, as shown above, is 33,935, an increase of 25,938, or 424 per cent, being an average growth of 2,600 members per year. The following table shows the membership of some of the State societies ten years ago and today:

	1899.	1909.	Increase.
Colorado	326	739	226 per ct.
California	309	1,861	602 per ct.
Connecticut	660	872	132 per ct.
Florida	145	285	190 per ct.
Illinois	515	5,265	1022 per ct.
Indiana	1,561	2,587	165 per ct.
Iowa (Est.)	684	1,850	270 per ct.
Kentucky	500	2,231	446 per ct.
Louisiana	458	1,069	231 per ct.
Michigan	550	1,892	344 per ct.
Minnesota (Est.)	450	1,214	270 per ct.
Nebraska (Est.)	400	863	215 per ct.
New Hampshire	360	520	171 per ct.
New Jersey	854	1,400	163 per ct.
Ohio	885	3,962	450 per ct.
Tennessee	400	1,377	344 per ct.
Texas	297	3,100	1043 per ct.

The figures are lacking for the total membership of the combined State societies in 1889, but in 1902 an estimate made by the Committee on Reorganization showed the total membership of all the medical societies at that time to be approximately 34,000. The combined strength of the associations constituent to the American Medical Association is today 67,362. Another point of comparison instituted was in the matter of State journals. In 1899 not a single State association owned and published an official journal. Today there are nineteen, while a number of other States have recognized certain journals as official. Further comparison was also made regarding the increase in the effectiveness of the organization in county, State and nation during the past decade, showing the progress that has been made along all lines.

The report of the Board of Trustees was presented by the chairman, Dr. William H. Welch, of Baltimore. The work of the Council on Pharmacy and Chemistry was strongly commended, the report stating that it is impossible to overestimate the value of the work done by the

council, and that the physician is no longer dependent on the exaggerated, extravagant and often untruthful and absurd statements of the advertising agent for his knowledge concerning new products and preparations, but may obtain the desired information from a trustworthy source, which has no other aim than to make known the facts in the case.

The work of Dr. McCormack was indorsed.

The value and the importance of the American Medical Directory was considered, and the statement emphasized that the directory should be regarded not primarily as a commercial enterprise, but as an effort on the part of the Association to supply the medical profession and the public with reliable data regarding the physicians of the country, and that it consequently should not be regarded as a source of revenue, but rather an investment for the benefit of the profession and the public.

The principal recommendation of the board related to the erection of the new building which has been made necessary by the constantly expanding work of the Association. The trustees recommended that the House of Delegates authorize the construction of a new building at a cost of approximately \$200,000.00. The proposed building will be 61 by 120 feet, consisting of six stories and a basement, with walls sufficiently strong to add two more stories, if necessary. In concluding their report, the Board of Trustees called attention to the fact that this meeting closed the most remarkable decade in the history of the organization.

Mention was also made of the death of Dr. T. J. Hapel, which occurred just before the Atlantic City meeting. The addenda to the trustees' report contained the detailed reports from the subscription department of the Journal, treasurer's report, auditor's report, giving the receipts and expenditures of the various departments of the Association work.

The Committee on Medical Legislation presented a report covering the progress of national and State legislation during the past year, the various measures which have been before Congress along the line of the regulation of public health, the organization of a national bureau of public health, the reorganization and expansion of the United States Public Health and Marine Hospital Service, the various bills relating to naval medical organization and hospital ships, and the sanitary work in the canal zone.

In reviewing the legislative work in the various States, a summary of the legislation proposed, enacted, and defeated in the different States was presented, showing that the legislatures had been in session during the past winter in forty States, and that the two most important matters had been the passage of the model vital statistics bill in Missouri and the effort to enact the Herbst-Shreve bill, regulating the practice of medicine in Pennsylvania. The work of the Bureau of Medical Legislation in preparing model bills for uniform State legislation on vital statistics, pure food and drugs, regulation of the practice of medicine, etc., was considered, and the recommendation was made that the Committee on Medical Legislation be authorized to call a general conference to be devoted to the discussion of the essentials of a uniform medical practice act for adoption by the various States.

The report of the Council on Medical Education contained a summary of the work of the council for the past year, special attention being given to the fifth annual conference on medical education held in Chicago, April 5, 1909, at which the principal topic for discussion was the report of the Committee on Medical Curriculum. A large amount of most interesting and valuable statistical and tabulated matter was presented, showing the present condition of medical education in the United States. The report stated that in the last five years there had been much progress toward uniformity. Five years ago, only twenty State medical practice acts made provision for preliminary education; today thirty-six have such a provision. Great advance has also taken place in the requirements for examination, the increase in the authority of the boards and the increased reciprocal relations between the various State boards.

At the second meeting of the House of Delegates, held Monday afternoon, the report of the Committee on Ophthalmia Neonatorum was presented, giving a summary of all resolutions, communications, reports, etc., relating to the work of the committee, the members of the National Committee on Ophthalmia Neonatorum, consisting of one member from each State, the members of the committees of the various State medical societies, a tabulation of the replies to a circular letter sent to the superintendents of schools for the blind regarding the percentage of blindness due to this cause, the progress of the campaign against this disease carried on during the past year, as well as a large amount of most interesting and valuable matter on the laws regulating ophthalmia in the various States, as well as the laws regulating it in the larger municipalities. The report of the committee is a most valuable one as showing the present condition of legislation and public opinion on this subject.

The report of Dr. J. N. McCormack, of Kentucky, chairman of the Committee on Organization, was presented, reviewing his work for the past year and emphasizing the possibilities of such work before educational bodies and schools, and especially in institutions which are engaged in preparing teachers, editors, lawyers, clergymen and other leaders of public opinion for their life work. Dr. McCormack stated that his experience had convinced him

that with the aid of the teachers and the schools, a generation of votes and legislators can soon be so trained that the vast interest represented by preventive medicine will come to be appreciated as among the most important and easily conserved of the nation's resources. He further urged such an alliance between physicians and teachers as would make all that is involved in the work of the medical profession matters of common knowledge.

The Committee on Scientific Research recommended grants of \$200.00 each to Drs. Isabel Herb, of Chicago, H. T. Ricketts, of Chicago, and R. M. Pearce, of New York; also a grant of \$200.00 each to Drs. D. J. McCarthy and M. K. Myers, of Philadelphia. The committee asked for an appropriation of \$1,000.00 for the coming year.

The Board of Public Instruction on Medical Subjects reported progress.

The report of the Committee on Nomenclature and Classification of Diseases, appointed last year, submitted an exhaustive report giving the specific recommendations of the committee, as well as the recommendations of the Committee on Vital Statistics of the American Public Health Association, showing the changes advised in the international classification of the cause of death.

The Committee on Patents and Trade-marks reported progress and asked to be continued for another year.

The Committee on Davis Memorial asked for an appropriation of \$5,000.00 on behalf of the Association.

The Committee on the Uniform Regulation of Membership submitted a lengthy report, tabulating the replies received from all of the State secretaries in answer to inquiries regarding the provision of their by-laws and the methods employed in regulating the membership in each of the State societies. After summarizing the reports received, the committee stated that the present lack of uniformity and system in the regulation of membership is costing the organized profession of the country thousands of dollars each year in the form of postage, clerk hire, stenographers' salaries, etc., in carrying on unnecessary correspondence, and stated that if a uniform general system were adopted by all county and State societies, as well as the American Medical Association, it would result in an enormous saving of time and labor, and consequently of expense to the organization. The committee recommended that all State associations be requested to make their fiscal year conform to the calendar year, and to instruct their component county societies to adopt the same rule. The committee also further recommended that it be continued and that it be increased by the addition of four State secretaries; also that it be instructed to draft uniform by-laws for the regulation of membership for State and county societies, as well as to devise a system of necessary blanks and forms applicable for general use. The report also stated that the question of membership qualification as well as that of procedure in the case of discipline had been brought to the attention of the committee, but that nothing had been done with them beyond the collection and tabulation of facts thereon.

After the presentation of a number of communications, resolutions, etc., which were referred to the appropriate committees, the house adjourned until Tuesday afternoon.

At the third meeting of the house, a supplementary report from the Board of Trustees was presented, approving the recommendation of the Committee on Scientific Research regarding the grants and awards made by the committee.

The Reference Committee on Medical Education reported, strongly indorsing the work of the Council on Medical Education and recommending the report of the council to the careful attention of all members, and especially to medical educators.

After the report of the Committee on Scientific Exhibit, the report of the Subcommittee on Medical Legislation appointed to raise funds for the relief of the widow of Major Carroll was presented, showing that since January 18, 1909, \$6,267.84 has been subscribed for this purpose, leaving \$1,449.18 still to be raised.

The Reference Committee on Reports of Officers recommended the addition of two amendments to the by-laws in order to carry out the suggestion of President Burrell. The committee also recommended that the trustees be given full authority to proceed with the erection of the new building. Both of these recommendations were adopted.

The Reference Committee on Miscellaneous Business recommended that the Association appropriate the sum of \$5,000.00 for the Davis Memorial fund, provided that the additional sum of \$20,000.00 be collected for this purpose within three years.

The Council on Defense of Medical Research reported that its work during the past year had been carried on along the lines, first, investigating the actual conditions of animal experimentation in the United States and the opposition to it; second, taking precautions against the abuse of animal experimentation and against misconceptions of the conditions and purposes of medical research; third, diffusing information regarding laboratory procedures and the results of laboratory study of disease.

At the fourth meeting of the House of Delegates, the report of the Committee on Sections and Section Work, changing the name of the Section on Cutaneous Medicine and Surgery to the Section on Dermatology, and that of the Section on Surgery and Anatomy to the Section on Surgery, was adopted. The committee also recommended the appointment by the president of a special committee on anesthesia, comprising one member from each of the fol-

lowing sections: Surgery, Obstetrics and Gynecology, Practice of Medicine, Ophthalmology, Pharmacology and Therapeutics. The committee further recommended that a Section on Urology and Venereal Diseases be created whenever one hundred members of the Association petition for the organization of such a section. These recommendations were adopted.

The Reference Committee on Legislation and Political Action emphasized the importance of the movement for the organization of a National Public Health Department as well as the adoption of the proposed amendment of the national food and drugs act prohibiting the use of benzoate of soda as well as other preservatives in the preparation and preservation of foods for interstate commerce. The committee also indorsed the provision for a general conference to be devoted to a discussion of the essentials of a uniform medical practice act.

The Reference Committee on Reports of Officers presented a supplementary report indorsing the recommendation of President Gorgas in his address before the general session toward the erection in the national capital of a monument to medical officers who gave up their lives during the war of the rebellion, and recommended the appointment of a committee for this purpose.

The report of the director of postgraduate study showed that 200 county societies were now carrying on the postgraduate work, this number being double that of last year, 85 per cent of the societies which followed the course last year having taken it up again this year.

The Committee on Triennial Reapportionment submitted a report showing the apportionment of members of the House of Delegates among the various constituent State associations for 1910-11-12. This report shows no changes in apportionment in forty States, with increase in the following cases: Illinois, seven to nine; Kentucky, three to four; Missouri, four to five; Ohio, six to seven; Pennsylvania, eight to nine; Tennessee, two to three; Washington, one to two; West Virginia, one to two, a total increase of nine. In three States the number of delegates was decreased, as follows: Kansas, three to two; Michigan, four to three; North Carolina, three to two, making a net gain over the apportionment of 1906 of six delegates. The composition of the House of Delegates for the next three years will be:

Members from the constituent State associations..	133
Delegates from the sections of the American Medical Association	12
Representatives of government medical services..	3
Total.....	148

Dr. A. T. McCormack, of Kentucky, presented an amendment to the constitution authorizing the House of Delegates to arrange for the recognition of constituent associations lying outside of, but adjacent to, the United States. Under the rules, it was ordered to lie over until next year.

The fifth and final meeting of the House of Delegates was held on Thursday afternoon, the first order of business being the election of officers. The following officers were nominated, balloted for, and duly declared elected:

President—Dr. William H. Welch, Baltimore, Md.
First Vice President—Dr. Robert Wilson, Charleston, S. C.

Second Vice President—Dr. Charles H. Kipp, Newark, N. J.

Third Vice President—Dr. Alexander Lambert, New York City.

Fourth Vice President—Dr. Stanley P. Black, Pasadena, Cal.

General Secretary—Dr. George H. Simmons, Chicago, Ill. (re-elected).

Treasurer—Dr. Frank Billings, Chicago, Ill. (re-elected).
Trustees—Dr. C. E. Cantrell, Greenville, Tex. (to take the place of Dr. T. J. Happel, deceased); Dr. M. L. Harris, Chicago, Ill. (re-elected); Dr. C. A. Daugherty, South Bend, Ind.; Dr. William T. Councilman, Boston, Mass.

Following the appointment of committees and the election of associate members, the Reference Committee on Sections and Section Work submitted a supplementary report recommending that the name of the Section on Hygiene and Sanitary Science be changed to that of the Section on Preventive Medicine and Public Health. The report, with its recommendation, was adopted.

The Committee on Transportation and Place of Session reported that invitations had been received from St. Louis, Mo., and Los Angeles, Cal., and referred the matter to the House of Delegates for decision. On balloting, St. Louis was selected as the place for holding the next annual session.

After the presentation of a number of supplementary reports, resolutions, etc., the House of Delegates adjourned sine die.

New Members

Faulkner County, Thomas C. Watson, M. D., Mount Vernon.

Communications.

Preparations are already well under way for the next annual meeting of the Medical Association of the Southwest, which is to be held at San Antonio, November 9-11, 1909. Many prominent members of the profession are expected to be present, a number of whom will make addresses and read papers. The secretary will do all that lies in his power to secure reduced railroad rates, and if everyone who is expecting to attend will drop a card to F. H. Clark, secretary-treasurer, at El Reno, Okla., it will assist him in securing these rates. The headquarters will be at the "St. Antony" Hotel, which is amply large to accommodate all who desire to attend. A considerable interest has been manifested in an excursion to the City of Mexico and the international railroads have promised a rate of approximately \$26.00 for the round trip, with numerous side trips. If anyone is interested, they will confer a favor by writing the secretary. The local committees are all hard at work, and promise everyone who attends the very best kind of a time. This, with the fact that San Antonio is one of the old historic cities of this country, and the assurance of a splendid professional program, should bring the largest attendance that has ever attended these meetings.

IN EXPLANATION.

To the Editor:

I desire to assure those members of the State Medical Board of the Arkansas Medical Society who took umbrage at an editorial entitled "The Turner Bill Becomes a Law," which appeared in the May Journal, that reference was not made to any member of said board, nor to the acts of the board, past or present; any other construction of the language used is unwarranted. The medical practice act of 1903 was as far advanced over the old Clement law as the present law is over that of 1903, and the physicians who labored for the passage of the former bill are not less deserving of praise than those who labored for the enactment of the more recent law.

Trusting that this explanation will be sufficient to convince my critics that there was no animus behind the editorial, I am,

Yours very truly,

MORGAN SMITH, M. D.,
108 Louisiana Street.

News Items.

The Journal of the Oklahoma State Medical Association and the office of the secretary have been moved from Guthrie to Muskogee, Okla., with Dr. Claud A. Thompson as secretary and editor.

Personal.

Dr. C. M. Harvell has located at Osceola.

Dr. J. E. Pringle, of Hoxie, spent July 3 in the city.

Dr. W. C. Martin has moved from Newark to Newport.

Dr. R. L. Saxon will spend several weeks in London this summer.

Dr. E. T. Burns has recently moved from Smithville to Black Rock.

Dr. John F. Sanders, formerly of Friendship, Tenn., has located at Blytheville.

Dr. C. J. March, of Fordyce, was in the city on professional business a few days ago.

Dr. A. R. Stover has returned from the semicentennial anniversary of Baker University.

Dr. James H. Lenow, president of the state society, spent several days in Memphis recently.

Drs. J. P. Runyan and W. A. Snodgrass, accompanied by their wives, sailed for Naples July 8.

Dr. H. T. Collier, ex-president of the Mississippi County Medical Society, recently moved from Osceola to McKenzie, Tenn.

The little babe of Dr. H. R. McCarroll, of Walnut Ridge, councilor of the First District, got a fall a few days ago, fracturing one of its lower limbs.

Dr. W. C. Graves, of McAlester, Okla., assistant general surgeon of the Rock Island Railroad, spent several days in the city during the latter part of June.

Dr. R. H. T. Mann and wife, of Texarkana, will sail for Europe July 24, for a two months' trip. The doctor will attend the eye, ear, nose and throat clinics.

Dr. Eugene C. Hay, of Hot Springs, delegate to the American Medical Association, was our only representative in the House of Delegates at the Atlantic City meeting.

Dr. Paul R. Vasterling, who has been assistant chief surgeon of the Iron Mountain Railroad for a number of years, has been

promoted to chief surgeon. Dr. W. B. Outten, who has held this position for thirty-four years, has been made consulting surgeon, with offices in St. Louis, Mo.

Dr. Thomas H. Cates has returned from Philadelphia, where he was graduated from the Jefferson Medical College, and is the guest of his mother, Mrs. F. L. French. Dr. Cates will leave in about three weeks for Philadelphia to assume his duties as house physician in St. Joseph's Hospital.

Dr. John G. Watkins and Miss Zilpah Barrow, both of this city, were wedded at 8 o'clock on Thursday evening, July 1, at the home of the bride's father, Judge J. C. Barrow. Dr. and Mrs. Watkins left at midnight for a short honeymoon trip and will be at home to friends after July 16, at 406 Broadway.

Dr. W. H. Moorehead, of Stuttgart, and one of its most prominent physicians, was very badly injured on June 8, by the breaking of some part of the machinery in a pumping station on his rice farm. His son received injuries at the same time, which resulted in his death in a few hours. Dr. Moorehead was brought to Little Rock and placed in the Physicians and Surgeons' Hospital, where he is rapidly recovering.

Dr. L. E. Love and Miss Rena Hall, of Dardanelle, were married June 30 at the residence of the bride's father, Judge L. C. Hall. They left immediately for a bridal trip to Canada, but will stop en route in Memphis and Cincinnati, visiting friends and relatives. Dr. Love is well known throughout the state, not only for professional prominence, but because of his enthusiasm and energy as a member of the Executive Committee of the Arkansas division of the Southern Cotton Association.

County Societies.

FRANKLIN COUNTY.—The regular May meeting of the Franklin County Medical Society was held at Ozark. In spite of the small attendance the meeting was quite a success. Dr. Turner had a paper on typhoid fever, which was freely discussed. The advisability of holding alternate meetings at Charleston, so that members from that section of the county could more easily attend, was discussed, and Charleston was selected as the next place of meeting.

THOMAS DOUGLAS, *Secretary*.

HEMPSTEAD COUNTY.—The Hempstead County Medical Society, at a recent meeting held at Hope, elected the following officers for the ensuing year:

President—Dr. H. R. Giles, Hope.

Secretary—H. H. Darnall, Columbus.

Dr. J. R. Autry, of Columbus, was elected delegate to the State society, and Dr. J. H. Weaver, of Hope, as alternate.

H. H. DARNALL, *Secretary*.

GREEN COUNTY.—The Green County Medical Society held its monthly meeting Wednesday, July 7, 1909, with the following program: Diphtheria, by Dr. J. H. Haley; Enterocolitis, by Dr. G. L. Hopkins; Typhoid Fever, by Dr. Thad Cothren; Nephritis, by Dr. Paul Dickson; Erysipelas, by Dr. H. N. Dickson; Oral Hygiene, by J. H. Green, D. D. S.; Friendship in the Profession, by Dr. R. C. Cavitt; Report of Cases, and Clinic.

OLIVE WILSON, *Secretary*.

BENTON COUNTY.—The Benton County Medical Society met in regular session at Bentonville, Tuesday, June 8, 1909, with the following members present:

Drs. C. A. Rice, of Gentry; Thomas W. Hurley, Charles H. Cargile, J. L. Smiley and J. H. Lindsey, of Bentonville; L. O. Green and J. B. Mathis, of Pea Ridge; E. E. Pickens and J. A. Furgus, of Rogers; G. A. Hughes and L. T. Jackson, of Gravette; Charles W. Horton, of Hiwasse; M. W. Duncan, of Centerton; E. J. Highfill, of Osage Mills; T. M. Rice, of Avoca. Visitors: Councilor Dr. F. B. Young, of Springdale, and Dr. Perkins, of Springdale.

The president called the meeting to order at 1 p. m., and after the reading and approval of minutes of previous meeting, an interesting session of four hours was held and several cases reported and discussed freely by all members and visitors present.

Dr. E. J. Highfill read a paper, giving his experience with two cases of pneumonia, with abscess in each case, with operation and drainage in each case with recovery. This paper was well received and freely discussed. Dr. Thomas W. Hurley read a paper, which we send the Journal for publication. Dr. F. B. Young, councilor Tenth District, gave a very interesting talk along the line as to what would be the best way of keeping up the best interest in society work, giving as his opinion that the society should take some line of study and complete same, and then another, etc. After several talks along this line the society adjourned to meet at Gravette the next regular meeting day, the second Tuesday in July.

The program for the July meeting is as follows: Paper by Dr. L. T. Jackson, subject, Heart Lesions. Discussion to be opened by Dr. J. T. Clegg. Paper by Dr. G. A. Hughes, subject, Enterocolitis. Dr. Charles H. Cargile to discuss same. Paper by Dr. J. T. Powell, subject, Dysentery. Dr. E. E. Pickens to open the discussion.

J. H. BEARD, *Secretary*.

UNION COUNTY.—The Union County Medical Society met in regular session June 7, 1909. The meeting was called to order by Dr. J. A. Moore, president *pro tem*, the regularly elected president, Dr. H. H. Niehuss, being absent. A paper was read by Dr. George W. Murphy, of Strong, which was enjoyed and freely discussed. On account of the withdrawal of Dr. George from the society, the office of vice president was made vacant; for that reason an election was held to fill the unexpired term, Dr. J. M. Sheppard being elected. Members present were Drs. Irby, Moore, and Murphy, of Strong; McCall, Sheppard, Whorton, Purifoy, Thurman and Pettus. The building of a hospital by the profession of this county was mentioned and brought forth many enthusiastic remarks from those present. The entire membership of the society seems very much interested in this movement, and it can safely be predicted that it will be built.

C. S. PETTUS, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society met in regular session at Blytheville June 15, 1909, with the following physicians present: W. H. Borun, G. W. Parker, C. C. Stevens and J. F. Sanders, of Blytheville; R. P. Nall, of Armorer; F. A. Robinson, of Barfield; S. A. Lowry, T. F. Hudson and J. S. McCreight, of Luxora; E. E. Craig, of Pecan Point; R. T. Nowlin, of Evadale; C. M. Harwell and O. Howton, of Osceola. Dr. Augustus Davis, of Texico, New Mexico, and Dr. J. A. Pipkin, of Grainger, Tex., were pleasant visitors and took part in the discussions. Dr. W. H. Borun, of Blytheville, read an excellent paper on Miscarriage

and Abortion, which was thoroughly discussed. Dr. R. P. Nall presented a patient suffering from a stab wound in the right lung, and Drs. Howton and Harwell a case of bone tuberculosis, both tibia being affected with the formation of a false joint in the right. The society adjourned to meet at Osceola July 20, 1909.

O. HOWTON, *Secretary*.

Obituary.

A. L. Whitcomb, M. D., graduated from the Chicago Medical College in 1872. Died of apoplexy, in his office at Rogers, April 10, 1909, age 61 years. After graduating, located in Illinois, where he practiced his profession until 1887, moving to St. Paul, Minn., where he resided until 1905, at which time he came to Rogers. He was a member of the Benton County and Arkansas Medical Societies.

At the May meeting of the Benton County Medical Society the following resolutions were adopted:

Whereas, God in His infinite wisdom has called from among us one of our esteemed members, Dr. A. L. Whitcomb, and **whereas**, the intimate relations held by him in the faithful discharge of his duties as a physician, citizen, and a member of this society, make it imminently befitting that we record our appreciation of him; therefore, be it

Resolved, That the long devotion to the interests of organized medicine and his high ideals of his profession be held in grateful remembrance.

Resolved, That in the sudden removal of such a life from this society we have lost a scientific and progressive physician, a good citizen, and a vacancy has been left that will be realized by all members of this organization.

Resolved, That we extend our sympathy to the bereaved ones of the deceased, and express our hope that even so great a loss to us all may be overruled for good by Him who doeth all things well.

Resolved, That a copy of these resolutions be spread upon the minutes of the Benton County Medical Society, and a copy furnished the papers of Rogers, a copy published in the Journal of the Arkansas Medical Society and a copy furnished the relatives of the deceased.

E. E. PICKENS.

R. S. RICE.

J. A. FERGUS.

Committee.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS.

1909-1910.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. H. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	R. C. Dorr	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarrroll	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunningham	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Oseola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Ouachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marvell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
Saline	J. M. Phillips	Benton	C. Prickett	Traskwood
Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Summers	Elm Springs	Nina V. Hardin	Fayetteville
White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Members of Component Societies.

Arkansas County.

Boswell, W. H. Almyra
 Bunn, A. D. Humphrey
 Derrick, H. C. De Luce
 Fowler, Arthur Humphrey
 Hill, B. H. Stuttgart
 Lowe, A. M. Gillett
 Lowe, W. W. Gillett
 Moorehead, W. H. Stuttgart
 Morpheus, L. H. Stuttgart
 Park, C. E. De Witt
 Rasco, C. W. De Witt
 Sillin, C. W. Stuttgart
 Winkler, E. H. De Witt
 Winters, H. B. Bayou Meto

Ashley County.

Cockersham, H. E. Portland
 Cone, A. E. Portland
 Crow, L. M. Crossett
 George, B. F. Parkdale
 Hanson, C. P. Berea
 Hawkins, M. C. Parkdale
 Knott, A. D. Wilmot
 Norman, W. S. Hamburg
 Scott, C. M. Hamburg
 Simpson, J. W. Hamburg
 Sparks, J. E. Crossett
 Spencer, S. J. Hamburg
 Taylor, I. S. Crossett
 Williams, R. G. Parkdale

Baxter County.

Cannady, C. T. Cotter
 Hipp, J. A. Buford
 Morrow, J. J. Cotter
 Roe, J. B. Calico Rock
 Smith, H. H. Calico Rock

Benton County.

Beard, J. H. Gentry
 Buflington, O. H. Decatur
 Cargile, Charles H. Bentonville
 Clegg, J. T. Siloam Springs
 Clemmer, J. L. Springtown
 Duckworth, F. M. Siloam Springs
 Duncan, M. W. Centertown
 Eubanks, F. G. Decatur
 Furgus, J. A. Elm Springs
 Green, L. O. Pea Ridge
 Griffin, J. M. Sulphur Springs
 Harlow, C. W. Hiwassa
 Highfill, E. J. Osage Mills
 Hughes, G. A. Gravett
 Hurley, C. E. Bentonville
 Hurley, T. W. Bentonville
 Jackson, L. T. Gravette
 Lindsey, J. H. Bentonville
 Mathis, J. B. Pea Ridge
 Pickens, E. E. Rogers
 Powell, J. T. Maysville
 Rice, C. A. Gentry
 Rice, R. S. Rogers

Rice, T. M. Brightwater
 Sexton, J. Z. Siloam Springs
 Smiley, J. L. Bentonville
 Thomason, H. E. Siloam Springs
 Webster, J. W. Siloam Springs

Boone County.

Baines, Schwartz Bergman
 Bolinger, John Lead Hill
 Crebs, R. S. Olney
 Fowler, J. H. Harrison
 Hathcock, C. M. Harrison
 Johnson, J. J. Harrison
 Kirby, F. B. Harrison
 Kirby, L. Harrison
 McCurry, D. K. Alpena Pass
 Potts, J. R. Harrison
 Reich, J. L. Everton
 Routh, Charles M. Batavia
 Routh, H. L. Batavia
 Sims, J. L. Harrison
 Vance, A. J. Harrison
 Watkins, G. J. Bellefonte

Bradley County.

Carruth, O. A. Warren
 Crow, M. T. Ingalls
 Fike, W. T. Warren
 Green, B. H. Warren
 Jackson, D. A. Johnsville
 Martin, C. N. Warren
 Martin, R. Warren
 Wilson, G. L. Hermitage

Members of Component Societies—Continued.

Calhoun County

Jones, E. Harrell
Jones, E. T. Hampton
Rhine, T. E. Thornton
Wilson, D. F. Hampton

Carroll County.

Bolton, J. B. Eureka Springs
Bolton, J. Fred. Eureka Springs
Davis, C. E. Eureka Springs
Floyd, R. G. Eureka Springs
George, W. P. Berryville
George, Charles. Berryville
Jordan, J. D. Eureka Springs
Lassagne, W. F. Eureka Springs
Pace, Henry. Eureka Springs
Poynor, E. E. Green Forest
Poynor, I. M. Berryville

Chicot County.

Anderson, A. G. Eudora
Baker, E. Dermott
Barlow, E. E. Dermott
Eason, J. T. Grand Lake
Henry, R. N. Lake Village
McGehee, E. P. Lake Village
Nichols, W. J. Grand Lake
Norton, M. M. Sunnyside

Clay County.

Cunning, I. H. Knobel
Green, T. H. Dumas
Hiller, J. P. Pollard
Hughey, M. C. Rector
Latimer, N. J. Corning
McKinney, A. B. Corning
Newkirk, C. H. Datto
North, A. Palatka
Simpson, A. R. Corning
Thornton, E. W. Piggott
Waddell, M. A. B. Success

Clark County.

Cuffman, J. H. Gurdon
Hardy, H. Stroud
Hearn, A. G. Arkadelphia
Moore, W. M. Arkadelphia
Rowland, W. T. Arkadelphia
Smith, R. L. Okolona
Townsend, N. R. Arkadelphia
Wallis, J. C. Arkadelphia
Watson, W. S. Amity
Williams, E. K. Arkadelphia

Cleveland County.

Carter, J. D. Staves
Crump, J. F. Rison
Hamilton, A. J. New Edinburg
Hartsell, W. L. Draughton
Hughes, S. D. Lacy
Johnson, S. C. Kingsland
Leali, C. Kingsland
Robertson, A. B. Calmer
Stanfield, M. T. Orlando
Thorn, J. W. Cabool
Underwood, J. A. Thornton
Vance, J. W. Edinburg
Wolford, W. S. Kingsland

Columbia County.

Baker, J. J. Calhoun
Cannon, G. E. Magnolia
Cooksey, W. P. Atlanta
Hawkins, J. T. Mt. Holly
Hunt, W. J. Magnolia
Longino, H. A. Magnolia
Smith, P. M. Magnolia
Stevens, C. D. Magnolia
Twitty, Walter. Emerson
Vaughn, J. T. Emerson

Conway County.

Bradley, A. R. Morrilton
Clark, C. D. Morrilton
Goatcher, A. L. Plumerville
Gordon, F. Morrilton
Halbrook, J. F. Cleveland
Horton, Neal. Plumerville
Jackson, J. H. Center Ridge
Logan, B. C. Morrilton
Martin, J. S. Morrilton
Powell, J. W. Springfield
Presley, W. L. Morrilton

Ringgold, G. W. Morrilton
Steele, R. J. Morrilton
Yates, George. Morrilton

Craighead County.

Altman, J. T. Jonesboro
Burns, J. L. Jonesboro
Campbell, G. O. Truman
Crawford, J. E. Bay
Gracey, L. F. Jonesboro
Grady, N. F. Monette
Haltom, W. C. Jonesboro
Harrison, B. L. Little Rock
Howell, J. C. Dee
Jackson, W. W. Jonesboro
Lutterloh, C. M. Jonesboro
McDaniels, E. C. Tyrone
McVay, L. C. Marion
Nisbett, Frank. Brookland
Pelton, D. A. Jonesboro
Smith, S. E. Nettleton
Stroud, H. A. Jonesboro
Waddell, G. Jonesboro

Desha County.

Bowles, T. H. Dumas
MacCammon, Vernon. Arkansas City
Manker, M. D. McGehee
Smith, C. P. Arkansas City
Wheat, S. D. McGehee
White, J. A. Dumas
White, R. A. McGehee

Drew County.

Brown, W. A. Monticello
Carroll, D. C. Winchester
Collins, A. S. J. Monticello
Corrigan, M. B. Hot Springs
Cotham, E. R. Monticello
Fletcher, G. W. Winchester
Harris, S. Wilmar
Kimbro, S. O. Monticello
Pipkin, J. W. Tillar
Pope, M. Y. Monticello
Stanley, A. C. Tillar
Stanton, R. N. Collins
Tarrant, J. R. Monticello
Thompson, J. A. Collins

Franklin County.

Bennefield, C. E. Charleston
Blackburn, E. W. Ozark
Butts, R. J. Altus
Crocker, M. D. Lonell
Douglass, Thomas. Ozark
Gibbons, W. H. Webb City
Harrod, J. C. Denning
Hudson, E. M. Charleston
King, W. J. Sub Rosa
Post, L. J. Altus
Pruett, T. J. Altus
Rambo, W. W. Altus
Turner, H. H. Ozark
Weaver, E. R. Vesta
Williams, H. F. Ozark

Faulkner County.

Blakely, G. W. Gleason
Brown, G. S. Conway
Brown, J. F. Conway
Clark, W. I. Enders
DeJarnett, J. W. Guy
Dickerson, G. D. Conway
Downs, Joseph H. Vilonia
Greenley, D. R. B. Mayflower
Greeson, W. R. Conway
Henderson, G. L. Greenbrier
McMahan, J. E. Kendall
McCollum, I. N. Conway
Mabry, Thomas M. Holland
Munn, J. B. Vilonia
Ritcherson, F. G. Heber
Watson, Thos. C. Mount Vernon
Westerfield, J. S. Conway

Grant County.

Butler, J. L. Sheridan
Shaw, J. B. Sheridan

Greene County.

Bradsher, R. E. Marmaduke
Cavitt, R. C. Marmaduke
Cothren, Thad. Walcott
Dickson, H. N. Paragould

Dickson, Paul Paragould
Estes, S. J. Lorado
Fuson, C. M. Piggott
Graham, M. C. Gainesville
Haley, J. H. Paragould
Hammett, O. W. Paragould
Hill, L. H. Greenway
Hopkins, G. L. Paragould
Johnson, J. W. Paragould
Kennedy, E. L. Marmaduke
Lamb, James. Beech Grove
McKenzie, J. G. Paragould
Owens, W. R. Paragould
Sanders, R. H. Brighton
Scott, F. M. Paragould
Wilson, Olive. Paragould

Hot Springs-Garland County.

Barry, L. H. Hot Springs
Barry, W. H. Hot Springs
Biggs, E. L. Hot Springs
Biggs, Orvis. Hot Springs
Brunson, R. Hot Springs
Bunch, W. J. Hot Springs
Burton, O. H. Hot Springs
Bush, J. W. Hot Springs
Collings, H. P. Hot Springs
Collings, S. P. Hot Springs
Connell, W. H. Hot Springs
Cowe, Fannie W. Hot Springs
Dake, Charles. Hot Springs
Dake, Frank. Hot Springs
Davis, R. G. Hot Springs
Dimon, R. B. Hot Springs
Drennen, C. Travis. Hot Springs
Eastman, E. H. Hot Springs
Ellis, L. R. Hot Springs
Ellsworth, E. H. Hot Springs
Forbes, W. O. Hot Springs
Garnett, A. S. Hot Springs
Greenway, G. C. Hot Springs
Harrell, M. L. Hot Springs
Hay, E. C. Hot Springs
Hebert, G. A. Hot Springs
Holland, E. D. Hot Springs
Holland, T. E. Hot Springs
Horner, J. S. Hot Springs
Jelks, F. W. Hot Springs
Jelks, James T. Hot Springs
Laws, W. V. Hot Springs
McClendon, J. W. Hot Springs
McConnell, C. A. Hot Springs
Martin, E. H. Hot Springs
Merritt, J. F. Hot Springs
Minor, J. C. Hot Springs
Mount, M. F. Hot Springs
Parker, W. E. Hot Springs
Proctor, J. M. Hot Springs
Randolph, J. P. Hot Springs
Reamy, S. Hot Springs
Robertson, J. A. Hot Springs
Rowland, J. F. Hot Springs
Sanders, T. E. Hot Springs
Shaw, A. D. Hot Springs
Short, Z. N. Hot Springs
Smith, J. W. Hot Springs
Steele, S. B. Hot Springs
Thompson, M. G. Hot Springs
Tribble, A. H. Hot Springs
Vaughan, P. T. Hot Springs
Weimer, R. Hot Springs
Williams, A. U. Hot Springs
Williams, F. M. Hot Springs
Vinegar, E. F. Hot Springs
Wood, J. S. Hot Springs
Wooten, W. T. Hot Springs

Hot Spring County.

Bramlett, E. T. Malvern
Carroll, W. A. Saginaw
Cox, J. A. Donaldson
Donnell, R. N. Malvern
McCray, E. H. Malvern
Phillips, R. Y. Malvern
Williams, J. M. Malvern

Howard-Pike County.

Alford, T. F. Murfreesboro
Cannon, W. H. Saratoga
Daly, J. M. Nashville
Gibson, W. M. Nashville
Holt, J. M. Tokio
Hopkins, G. S. Nashville
Hutchinson, D. A. Nashville
Rivers, J. M. Mineral Springs
Robinson, W. S. Nashville
Toland, W. H. Mineral Springs
Weaver, S. J. Fulton
Wright, C. W. Buck Range

Members of Component Societies—Continued.

Hempstead County.

Autry, J. R. Columbus
Barrow, J. D. Ozan
Briant, W. A. Hope
B'Shears, B. L. Fulton
Darnall, H. H. Columbus
Garner, T. J. Washington
Garrett, H. J. F. Hope
Giles, H. R. Hope
Gillespie, L. J. Hope
Martindale, G. H. Hope
Nelson, C. H. Washington
Shackleford, L. C. Hope
Smith, Don. Hope
Waddell, J. S. Hope
Weaver, J. H. Hope

Independence County.

Case, J. W. Batesville
Dorr, K. C. Batesville
Evans, A. A. Bethesda
Evans, D. E. Bethesda
Gray, F. A. Cave City
Hinkle, Charles G. Batesville
Huddleston, W. T. Sulphur Rock
Johnson, O. J. T. Floral
Kennerley, J. H. Batesville
Lawrence, W. B. Batesville
Martin, C. W. Newport
Pascoe, V. L. Newark
Rodman, T. N. Cushman
Thialliere, A. Pleasant Plains
Wyatt, W. A. Rosie

Jackson County.

Bell, J. F. Weldon
Best, A. L. Newport
Causey, G. A. Swiftton
Graham, J. S. Tuckerman
Jamison, O. A. Tuckerman
Jones, O. E. Newport
Owen, Henry Newport
Owen, H. M. Newport
Stayton, L. T. Tuckerman
Stephens, G. K. Newport
Walker, H. O. Newport
Watson, E. L. Newport
West, C. Newport
Willis, L. E. Newport
Wilson, W. F. Elmo

Johnson County.

Allen, C. S. Harmony
Blakely, J. P. Hartman
Blakely, Thomas B. Coal Hill
Burgess, M. E. Lamar
Carey, Angier B. Knoxville
Cook, L. A. Clarksville
Cowan, J. M. Lamar
Graves, S. M. Payne
Gray, L. C. Clarksville
Horner, J. R. Spadra
Huddleston, G. D. Lamar
Hunt, Earle Clarksville
Hunt, E. C. Smeadley
Hunt, William R. Clarksville
Kolb, J. S. Clarksville
Love, J. G. Hartman
Mitchell, John W. Clarksville
Murphy, J. M. Hagarville
Murphy, R. M. Hagarville
Ogilvie, James W. Harmony
Patterson, C. H. Ozark
Robinson, Charles E. Clarksville
Smith, W. F. Clarksville
Stewart, J. L. Spadra

Jefferson County.

Blackwell, O. G. Pine Bluff
Blankenship, W. H. Pine Bluff
Breathwit, William Pine Bluff
Brunson, C. K. Pine Bluff
Carutbers, C. K., Jr. Pine Bluff
Clark, O. W. Pine Bluff
Crutcher, William Pine Bluff
Duckworth, G. M. Pine Bluff
Ferguson, F. P. Sweden
Gallagher, B. H. Pine Bluff
Glover, C. A. Pine Bluff
Hankinson, O. C. Pine Bluff
Jenkins, J. S. Pine Bluff
John, J. W. Pine Bluff
John, M. O. Moscow
Jordan, A. C. Pine Bluff
Kite, N. S. Pine Bluff
Lowe, W. T. Pine Bluff

Luck, B. D. Pine Bluff
Mimms, A. D. Sberill
Orto, Z. Pine Bluff
Rowell, Fred Pine Bluff
Savin, T. L. Pine Bluff
Scales, J. W. Pine Bluff
Selton, R. P. Wabbaseka
Smith, J. S. Pine Bluff
Stewart, W. S. Pine Bluff
Thompson, A. G. Pine Bluff
Troupe, A. W. Pine Bluff
Williams, Harry Pine Bluff
Williams, H. E. Pine Bluff
Witbers, J. W. Pine Bluff
Wright, C. E. Altbeimer
Woodul, T. W. Pine Bluff
Woods, R. P. Altheimer

Lafayette County.

Baker, F. E. Stamps
Bright, D. W. Lewisville
Bullock, W. A. Stamps
Burns, R. P. Bradley
Hoover, A. S. Stamps
McKnight, J. F. Walnut Hill
Magee, L. F. Frostville
Searcy, J. A. Buckner
Warren, W. N. Buckner
Youmans, F. W. Lewisville

Lawrence County.

Ball, C. C. Ravenden
Coffman, J. W. Black Rock
Criger, J. R. Walnut Ridge
Croom, H. Strawberry
Culp, C. W. Mammoth Spring
Guthrie, T. C. Jessup
Hatcher, Wright Imboden
Henderson, A. G. Imboden
Hughes, J. C. Walnut Ridge
Land, J. C. Walnut Ridge
McCarroll, H. R. Walnut Ridge
Morris, J. W. Denton
Neece, T. C. Walnut Ridge
Peacock, A. L. Lynn
Poindexter, J. C. Imboden
Ponder, E. T. Walnut Ridge
Pringle, J. E. Hoxie
Smith, W. A. Walnut Ridge
Stephens, J. M. Clover Bend
Wallace, J. W. Alicia
Warren, G. A. Black Rock
Watkins, M. Walnut Ridge
Woodyard, R. R. Black Rock

Lee County.

Bean, W. B. Marianna
Beaty, W. S. Vineyard
Blue, J. B. Parkin
Bradford, W. S. Haynes
Carter, D. C. Marianna
Chaffin, C. W. Moro
Chanell, C. T. Marianna
Darnell, E. Seelig
Deaderick, W. H. Marianna
Foster, G. F. La Grange
Longley, W. W. Marianna
McClendon, A. A. Marianna
Russwurm, C. S. La Grange
Wall, E. D. Park Place
Williamson, O. L. Marianna
Wilsford, A. L. Moro

Lincoln County.

Dixon, C. W. South Bend
Isom, A. Gould
Johns, J. F. Osceola
Kimbro, W. C. Tyro
McClain, J. K. Star City
Price, C. C. Douglas
Tarver, B. F. Star City
Watts, S. D. Tyro

Little River County.

Shirey, Wesley L. Foreman
Vaughan, W. E. Richmond
York, William Ashdown

Logan County.

Armstrong, N. E. Booneville
Baskerville, W. F. Booneville
Bennett, W. H. Paris
Fletcher, T. M. Paris
Foster, M. E. Roseville

Harkins, R. A. Rateliff
Hederick, A. R. Booneville
Hooper, W. F. Booneville
Lipe, E. N. Blaine
McConnell, S. P. Booneville
Scott, Earl E. Magazine
Shibley, J. S. Paris
Smith, A. J. Paris
Smith, J. M. Paris
Thompson, R. C. Spielerville

Lonoke County.

Abbott, C. C. Pettus
Beatty, S. S. England
Benton, T. E. Lonoke
Bowers, A. L. Keo
Brewer, John F. Kerr
Chenault, J. C. England
Childers, J. M. Wattensaw
Corn, F. A. Lonoke
Cunning, John R. Lonoke
McRae, W. M. Scott
Murchison, A. J. England
Niven, J. D. Tucker
Southall, S. A. Lonoke
Stovall, B. L. Lonoke
Tankersley, T. J. Tomberlin
Thibault, H. Scott
Thompson, W. A. Cabot
Turner, W. S. Blakemore
Ward, O. D. England

Miller County.

Allison, Walter Texarkana
Beck, E. L. Texarkana
Dale, J. R. Texarkana
Eckle, G. M. Texarkana
Fuller, Earl Texarkana
Grant, R. L. Texarkana
Hunt, Preston Texarkana
Kelly, K. M. Texarkana
King, Marion Texarkana
Kittrell, T. F. Texarkana
Kosminsky, L. J. Texarkana
Lightfoot, J. A. Texarkana
McCurry, W. T. Texarkana
Mann, R. H. T. Texarkana
Sheppard, Paul Texarkana
Smiley, H. H. Texarkana
Smith, C. A. Texarkana
Webster, H. R. Texarkana
Wommock, W. E. Texarkana

Mississippi County.

Brewer, Thomas G. Osceola
Borum, W. H. Blytheville
Campbell, J. H. Bardstown
Collier, H. T. McKenzie, Tenn.
Craig, E. E. Pecan Point
Crawford, H. F. Osceola
Dunavant, H. C. Osceola
Dunn, D. M. Dell
Franklin, A. L. Manilla
Glenn, S. M. Ripley, Tenn.
Harbert, J. D. Marie
Harwell, C. M. Osceola
Howton, O. Osceola
Hudson, T. F. Luxora
Joyner, D. C. Joiner
Lowry, S. A. Luxora
Lundsford, L. B. Chickasawba
Martin, S. P. Blytheville
Mintree, J. N. Manilla
Nail, R. F. Armorell
Neal, S. R. Blytheville
Noak, P. G. Bardstown
Parker, G. W. Blytheville
Prewitt, R. C. Osceola
Robinson, F. A. Barfield
Sanders, J. F. Blytheville
Self, S. M. Burdette
Stevens, C. C. Blytheville
Turner, W. E. Butler

Monroe County.

Bradley, W. T. Monroe
McKnight, E. D. Brinkley
Marshall, A. H. Brinkley
Miller, J. C. Blackston
Murphy, F. T. Brinkley
Murphy, N. E. Clarendon
Saxon, R. L. Little Rock
Stout, J. T. Brinkley
Sylar, T. B. Holly Grove
Thomas, P. E. Clarendon
Terry, P. E. Brinkley
West, R. M. Clarendon

Members of Component Societies—Continued.

Nevada County.

Arnold, W. E. Prescott
 Bell, J. L. Prescott
 Buchanan, A. S. Prescott
 Chastain, J. S. Prescott
 Dickinson, W. H. Emmett
 Guthrie, Adam. Prescott
 Hesterly, S. J. Prescott
 Marsh, G. O. Prescott
 Rice, W. W. Prescott

Ouachita County.

Byrd, E. J. Millville
 Early, C. S. Camden
 Henry, H. H. Eagle Mills
 Henry, J. T. Eagle Mills
 Hudson, G. W. Camden
 McGill, A. G. Chidester
 Mahan, J. M. Bearden
 Meek, J. W. Camden
 Morgan, C. M. Camden
 Newton, W. L. Camden
 Powell, B. V. Lester
 Purifoy, W. A. Chidester
 Rinehart, J. S. Camden
 Rushing, J. L. Chidester
 Sanders, W. H. Stephens
 Simmons, W. H. Fordyce
 Thompson, J. S. Stephens
 Word, N. S. Camden

Perry County.

Blackwell, W. S. Bigelow
 Howard, M. E. Perryville
 Palmer, J. T. Bigelow
 Rieff, W. L. Perryville

Phillips County.

Altman, G. G. Helena
 Bean, J. W. Marvell
 Brown, E. T. Barton
 Bruce, W. B. Trenton
 Cox, A. E. Helena
 Cox, A. W. Helena
 Fink, M. Helena
 Hall, L. Turner
 Horner, A. A. Helena
 King, W. C. Helena
 Pearson, M. L. Poplar Grove
 Penn, G. E. Marvell
 Price, J. W. Marvell
 Rightor, H. H. Helena
 Russwurm, W. C. Helena
 Smythe, D. L. Fair
 Thompson, H. M. Marvell
 Trotter, C. H. Helena

Polk County.

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 Lee, F. A. Mena
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 Davis, E. N. Little Rock
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 Dibrell, J. L. Little Rock
 Dibrell, J. R. Little Rock
 Dooley, J. B. Little Rock
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 French, F. L. Little Rock
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 Kirby, H. H. Little Rock
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 McNeil, Martin Little Rock
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 Reed, C. C. Hensley
 Runyan, J. P. Little Rock
 Scott, C. V. Little Rock
 Sheppard, J. P. Little Rock
 Shinault, C. R. Little Rock
 Smith, Morgan Little Rock
 Snodgrass, W. A. Little Rock
 Stinson, H. C. Little Rock
 Stephenson, C. C. Seattle, Wash.
 Stewart, S. S. Little Rock
 Stover, A. R. Little Rock
 Sweatland, A. E. Little Rock
 Vaughan, Milton Little Rock
 Vinsonhaler, F. Little Rock
 Walt, D. C. Little Rock
 Watkins, Anderson Little Rock
 Watkins, J. G. Little Rock
 Wayne, J. R. Little Rock
 Witt, C. E. Little Rock
 Young, J. M. Little Rock
 Zell, A. M. Little Rock

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 Brown, J. W. Foster
 Brumley, G. W. Biggers
 Hall, H. B. Ravenden Springs
 Hall, L. H. Pocahontas
 Hamil, W. E. Pocahontas
 Hughes, W. E. Pocahontas
 Johnson, J. J. Biggers
 Johnson, T. Z. Holmes
 Loftis, J. R. Maynard
 Pickett, B. E. Ravenden Springs
 Pringle, C. E. Pocahontas
 Ruff, H. E. Pittman
 Shaver, B. M. Biggers
 Sheid, Carl. Pocahontas
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 Bell, C. W. Greenwood
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 Brooksher, W. R. Fort Smith
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 Cooper, St. Cloud. Fort Smith
 Davenport, E. N. Midland
 Davis, E. W. Island
 Dorente, D. R. Fort Smith
 Duncan, L. D. Waldron
 Eberle, J. G. Fort Smith
 Epler, G. E. Fort Smith
 Foltz, James A. Fort Smith
 Foster, J. H. Fort Smith
 Gant, J. R. Fort Smith
 Gardner, D. M. Fort Smith
 Garrison, C. W. Fort Smith
 Green, C. R. Fort Smith
 Hardin, R. E. Fort Smith
 Harr, J. T. Midland
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 Herrod, R. F. Fort Smith
 Holt, C. S. Fort Smith
 Holt, E. E. St. Louis, Mo.
 Jones, E. B. Hartford
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 Johnson, Hugh Bonanza
 King, H. C. Fort Smith
 King, J. M. Fort Smith
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The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

AMEBIASIS.*

ITS ETIOLOGY, DISTRIBUTION, DIAGNOSIS, SEQUELAE, AND TREATMENT.

John L. Jelks, M. D., Memphis, Tenn.

Dysentery, colitis, difficultas-intestinatorum, all generic terms, was a well-known and relatively well understood disease in prehistoric times.

Not until recent years, however, have these generic terms just mentioned become to the better informed displeasing and vague, almost without meaning, and I protest their use further than would be the term "fever," just fever, which may be typhoid, malarial, scarlet, or dandy.

Dysentery, generally speaking, is an acute or chronic inflammatory disease, usually affecting only the large intestines beginning in the rectum, but sometimes extending into the small bowel. In the acute form it is characterized by pain, tenesmus, frequent passages of mucus, blood, and pus; in fact, all the classic symptoms which have been given throughout all the ages, from the earliest description of dysentery, found in the papyri of Ebers, and that given by Hippocrates in the year 460 B. C., and on down to and including the present day writers.

Dysentery has not seemed to respect any country, climate, or race. Ayers very truthfully states that where man is found, there some of its forms appear. A. Hirsch says it had a wide distribution over the inhabited earth at all historic times. It is without doubt one of the four great epidemic diseases of the world. In the tropics its rav-

ages have been most deadly, destroying more lives than cholera, and to the armies it has been more destructive than powder and shot (Osler). Dysentery (generically speaking again) is a destructive giant compared to which strong drink is a mere phantom (McGregor), hence it behooves us to study and classify our cases closely and intelligently. Among the predisposing causes are seasons and temperature changes. It is most prevalent in warm climates, is most deadly in the tropics, and more cases are seen in the summer and autumn months. Race does not seem to affect this disease, strange though it may seem. The negro race does not seem to suffer much with reference to this disease because of the baneful consequences of poor hygienic conditions, such as overcrowding, improper food, poor ventilation, filth, improper clothing, and syphilis, a disease almost universal among this race. Within my experience, which is not at variance with other writers, dysentery is much more common among males. We find many cases where filth abounds and where sewerage is lacking. Many cases are found in institutions, such as asylums, barracks, and jails. During the Civil War Woodard reported 259,071 cases of acute, and 28,451 chronic cases in the Federal service alone. It is safe to estimate that the chronic cases, at least, were amebic. We cannot well associate dysentery with topographical conditions or with soil conditions, only so far as contamination of the soil is concerned. Epidemics have proven more fatal in the country than in the city. Soil that is contaminated with dysenteric excreta is a very great source of infection; Czerniecki tells of dysentery breaking out in two French squadrons in 1875 that were on the same ground occupied by cavalry regiments which had suffered with the disease. I have found many nests of amebic dysentery in the low, flat mill districts of the city and in

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

the marshy lowland, ill-drained sections of the country. No doubt, owing to the character of the soil in these localities, seepage contamination of drinking water sources occur. In one mill district of Memphis I saw seven cases of amebiasis in a radius of two blocks.

Another interesting fact is two families in which were found four of these cases purchased vegetables from the same Italian huckster. In these low, marshy districts we find the greatest growth of vegetation, which, when conditions are favorable, furnish a most suitable nidus for propagation and development of amebæ and medium for their transmission, as also of bacteria and other microorganisms.

Foods which contain specific organisms and those which produce putrefactive changes within the intestinal tract are prolific sources of infection. All grounding vegetables and fruits, especially those shipped from the tropics, are sources of infection. Undoubtedly infections with the amebæ have been traceable to eating lettuce, strawberries, cress, and tropical fruits. I believe our greatest source of amebic infection is through drinking water. I have been impressed by the fact that many cases of amebiasis are found among sportsmen, timbermen, and men who spend much of their time in the woods, drinking slash water or from pools and springs. Many of my cases tell me of neighbors and other members of their families who suffer in like manner and who procure their drinking water from the same source. I have treated one case of amebiasis in the person of a physician, who is confident that he was infected from drinking Mississippi River water. Impure water itself does not produce dysentery of any form, except when it contains amebæ or other special microorganisms, as the bacillus dysenteriae, which organism is also known to produce dysentery.

Time not permitting to dwell upon classification of dysentery cases, we here wish to consider the importance of one form, namely, amebic dysentery, and its importance to Arkansas medicine. Amebiasis is not solely a tropical disease, nor is it confined to the subtropic, though it is true the disease is more prevalent in India, Africa, the Philippine Islands, Cuba, Central America, and the lower borders of our own country.

In the United States the disease is usually sporadic, and is quite more frequently encountered than has been supposed. Osler says his cases of dysentery in the Johns

Hopkins hospital were almost exclusively amebic. It is rare indeed that I am called upon to treat a case of severe, acute, or chronic dysentery in which I am unable to find that the ameba histolytica is the specific cause of the disease. The ameba histolytica or ameba dysenteriae (Councilman and Loeffler) is a type of protozoön. unicellular and motile, several times the size of a red blood corpuscle. In structure the organism has an outer colorless zone, the ectosarc or hyaloplasm, and an inner granular zone, the endosarc or endoplasm. Its nucleus is eccentrically situated, and one or more vacuoles is present. This parasite is phagocytic in character, and may be seen to contain one to twelve red blood corpuscles, also other particles.

The entameba histolytica multiplies by segmentation, the nucleus and endoplasm dividing in such manner as to form several embryo cells for the corresponding number of new cells. The old cell either dies or

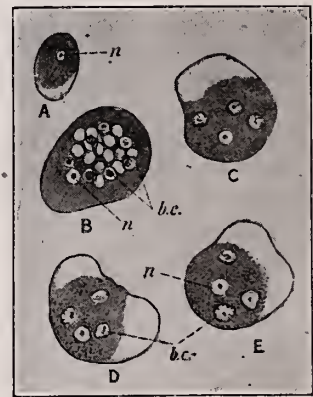


Fig. 2—*Amoeba histolytica* Schaud. A, young specimen; B, an older specimen crammed with ingested blood corpuscles; C, D, E, three figures of a living amoeba, which contains a nucleus and three blood corpuscles, to show the changes of form and the ectoplasmic pseudopodia; n, nucleus; b.c., blood corpuscles. After Jurgens. (Albutt & Rolleston's System of Medicine.)

enters into the incysted state. After an uncertain period the cell wall bursts and liberates the new ones. The mother cell, containing the daughter cells, may remain incysted for an indefinite time.

There are two well-recognized species of amebæ—the kind just described, and the ameba colonitis, which is occasionally found in healthy persons, and in other bowel affections. It is nonphagocytic, and propagation is by germination, or budding. All authorities now agree that the bacteria of symbiosis and other associated microorganisms have much to do with the pathogenesis of the ameba.

In those cases where I have found more active and phagocytic amebæ I have observed the greatest virulence, yet the inactive ameba may at any time assume greater activity after a lapse of weeks or months, during which time symptoms have abated. The amebæ are introduced into the intestinal tract through the mouth and stomach, pass on into the colon, and gain lodgment at favorite points, namely, the iliocecal valve, hepatic and splenic flexures, and especially upon the plicæ-transversalis-recti. In most cases the inflammation begins in the rectum and extends upward by continuity.

I have endeavored to explain the phenomena of exacerbation and amelioration of symptoms in the following ways:

First. The entameba histolitica is especially fond of feeding upon the juicy subepithelial structures, and in a given case this particular crop of generation within the plentiful surroundings may become indolent and easily satisfied, as also less active in the process of sporification.

Second. The parasite may be in a state of incystation, during which period the amebæ remain dormant or nonpathogenic until finally a different generation produces a more active and phagocytic ameba.

Third. Because of a greater or less number of bacteria of symbiosis, the presence of which, in the light of observation of most authorities, seem essential to the activity and virulence of the amebæ.

Fourth. The opsonic index, the development of which is yet in its infancy, may reveal other important facts.

As previously stated, the disease is most often contracted through drinking water. Flies and other insects are possible means of transmission, and it can be developed through contact.

When making a microscopic examination of the feces for amebæ, the following will be helpful to the inexperienced microscopist: Warm the slide slightly. Secure a small bit of the mucus from the stool and place upon the slide. Cover with a glass quickly and press it down until the material is thinly distributed. Examine at once with one-sixth objective. This should be done quickly, as the ameba may retain motility for a short time in temperatures lower than the body. Don't carry the mucus to the microscope at any distance, but carry the microscope to the patient. The amebæ may not be found in the first specimen examined, but do not be positive they are not present. I have made

repeated examinations during stages of amelioration before isolating the specific cause of recurrent attacks of so-called "mucocolitis."

It is better in some cases to examine scrapings from the ulcerated mucous membrane. The most important associated organisms are the bacillus coli commune, streptococcus, staphylococcus, trichomonas intestinalis, parametrismus, cercomonas intestinalis, lamblia intestinalis, and pyocyanase. The pathological lesions are almost always confined to the rectum and colon. Appendicitis is common. The mucosa first appears red and congested, and covered with blood-tinged mucus.

Then the ameba invades the submucosa, infiltration and edema result; then necrosis of the overlying structure soon occurs, resulting in an irregularly-shaped ulcer, which may project above the level of the mucosa. The amebæ gain access to the submucous structures through the interglandular spaces and carry with them the associated organisms. This multiple infection, so to speak, immediately sets up an active inflammation producing swelling of the glands, edema, and ecchymosis.

The muscular coat offers greater resistance to the amebæ; occasionally, however, the undermining process extends to the intermuscular tissue. In this way the larger ulcers form. There is not so much mixture of infection higher up in the intestinal tract, and as a rule the sharp-edged, clean-cut ulcer results, while below, in the rectum especially, there is great infiltration, undermining, and finally a breaking down, which in some cases produces a complete slough of mucous membrane and early death from profound toxemia. By careful examination with the proctoscope, small papular spots may be seen in many of these cases, which on the following day will be found to have broken down into the well-defined ulcer.

In another instance a few circinate or ring-work-like lines in the mucosa, a picture which is not observed in other forms of intestinal infection, will be seen. These lines or ulcers are chiefly submucous, but sooner or later break down into the undermined ulcer, and may then assume any shape. New lines will form, however, to tell the story.

The writer has also observed small openings at some point along the course of these circinate lines leading to extensive submucous ulcers. At other times the intestinal mucosa presents only a few circinate lines overlying the subepithelial ulcers, while the

remaining mucosa presents a red, granular appearance; in others the disease appeared only as one of hypertrophic proctitis, or a proctosigmoiditis.

Some of this condition is undoubtedly due to associated or collateral infection. Amebæ have been found free in the peritoneal cavity and in other parts of the body, especially the liver. Here, when unassociated with collateral infections, the parasites are nonpyogenic. Perhaps in almost all cases amebæ have been conveyed into the liver, and but for the fact that they were unassociated with pyogenic organisms, abscesses would surely follow. Hepatic abscesses complicate about twenty per cent of chronic amebic infection. Councilman found this complication in six out of eight autopsies; Strong and Musgrave fourteen out of ninety-seven. Out of twenty-five chronic cases treated by me in 1908, four were complicated by hepatic infection. In one a large abscess of the right lobe was found; in the other operated the right lobe was inflamed and firmly inherent to the omentum and hepatic flexure of the colon. A cholecystitis was also present. The infections may be carried into the liver in two ways—through the portal vein, which has often been found infected, and through the intestinal wall. In the more virulent cases the onset is usually sudden, and may or may not be ushered in with a rigor. The attack is preceded often by constipation and malaise. The patient may have from six to forty bowel movements the first day. Prostration is early, and by the second or third day considerable blood and purulent mucus appear, the latter being very offensive in odor. Temperature usually rises to 102 to 103 F.; is remittent in type. Delirium may be present. Abdominal pains and tympany and tormina are prominent symptoms. The facies abdominalis denote suffering and anxiety. The condition now assumes greater gravity. The thighs are flexed on the abdomen to relieve pressure. Considerable tenesmus precedes and accompanies bowel movements; later the more offensive discharges contain greater quantities of pus and blood, with perhaps mucofibrinous casts or mucous membrane sloughs. These symptoms are followed by subnormal temperature, rapid, feeble pulse, pinched expression, clammy perspiration, drawn, shiny appearance of the skin, collapse, and death. Or if the symptoms are less severe, and after the sloughs are passed healing follows, the process of repair is slow. But the ulcers are finally filled with granulation tissue and

fibrinous material, which later contracts, causing more or less stenosis, as you observed in the pathological specimen which I presented to you two or three years ago.

The writer looks with suspicion upon any case of dysentery or diarrhea recurring or relapsing which has failed to respond promptly to treatment. Dysentery and diarrhea are not essential symptoms of the existence of amebiasis. This is contrary to the generally accepted theory. In most cases the patient will complain of recurring diarrhea, which has existed for months or years. Most of the chronic cases will give a history of having lost much in weight, perhaps twenty to fifty pounds. Many have symptoms of interest to the stomach specialist and to the neurologist. Complications and sequelæ are numerous.

In 1,537 cases of diarrhea in Egypt, only 406 cases were uncomplicated. We have just referred to the great number of hepatic abscesses which complicate the disease. The vermiform appendix has been found to be involved in fully ten per cent of my chronic cases.

Among other complications are perforations, extensive sloughs, hemorrhages, cholecystitis, and jaundice, perirectal abscesses, hemorrhoids, pneumonia, pulmonary abscesses, portal thrombosis, cerebral and meningeal emboli, gastritis, atonia gastrica, and melancholia. In at least three chronic cases the writer has observed extensive staphylococic skin infections. This latter is a heretofore unreported complication so far as I know, yet really an interesting feature observed by me was that treatment of the intestinal conditions resulted in almost immediate benefit or cure of the skin infection.

What interest may attach to this, future observations alone can reveal. Perforations may occur at any point from the rectum to and including the appendix, and these complications have been observed in a great number of cases.

Treatment of this disease should be considered prophylactic, as well as medicinal and instrumental. Strict attention should always be given to hygienic conditions and surroundings. All excreta should be as carefully disinfected and deposited where the water supply will not be contaminated as if the case were one of typhoid fever.

Never allow excreta from dysenteric cases to be deposited in the garden, a common practice, when with knowledge and better sense you can impose a little more trouble and judgment upon your clientele.

If a person, knowing the danger, were to deposit excreta of a dysenteric person in a garden, it would be inexcusable. In the country and small towns, without sewerage, little closets are usually found in or near the garden, and are often made sources of fertilizing material for the growth of vegetables. It is the duty of the physician to educate his patients in regard to all dangers resulting from such gross unsanitary practices. Wells and cisterns are contaminated much more often than the average layman suspects. When the source of the drinking supply is at all questionable, the water should be boiled before drinking.

Overcrowding and poor ventilation should be prevented. The care of the room occupied by the patient is important. Unnecessary furnishings, such as curtains, rugs, carpets, etc., should be removed; disinfectants should be used at regular intervals.

Diet is as important as any other matter in the treatment of dysentery. During the period of acute intestinal symptoms it should consist of boiled, or perhaps better still, sterilized peptonized milk, whey, egg whites, light animal broths, peptonized beer juice, barley water, and perhaps one of the standard malted milk foods for infants. Food is best given at intervals of two hours in acute cases. Plain sweet milk may be diluted with barley or rice water, lime water, or Vichy, if imperfectly digested.

The articles of diet which are contraindicated are all dishes highly seasoned with pepper, cinnamon, nutmeg, etc.; vegetables, especially the raw varieties, pork, salt meats, veal and fish, saccharine foods, and fried foods, nuts, oatmeal, and fruits.

The medicinal treatment of dysentery is a most interesting subject. A great number of so-called specifics or much-praised remedies have been handed down to us, but most of them have proven so unsatisfactory that it is no surprise that most of the present-day suggestions are greeted with a certain amount of skepticism or personal prejudice. The systemic treatment for dysentery is erroneous. It is a local disease, and therefore requires local treatment. This is true with reference to immediate pathology, but other remote pathological conditions may require constitutional treatment.

The ameba is a very low form of organic life, and is very easily killed or rendered inert. The fact remains, however, that the parasites are embedded in the tissue in such

vast numbers as to make their destruction difficult. Certainly any chemical which is given by mouth, after passing through the stomach and small intestines, can possess little parasitic effect when it reaches the lower colon, sigmoid flexure, and rectum. Therefore, our chief reliance must be placed in local applications. These are used for the following purposes:

First. That of washing away the pus, mucus and debris, and at the same time the amebæ and other pathogenic organisms.

Second. That of antisepticizing the bowel contents and walls, that the further growth and development of the pathogenic organisms will be inhibited.

Third. The remedies selected should be those which will destroy the greatest number of organisms beneath the lining membrane of the bowel without destruction to the tissues themselves.

In the earlier stages of acute dysentery the patient should be put in bed and absolute quiet enjoined. Chilling draughts of air are to be cautiously avoided, since they are apt to increase the congestion of blood toward the internal viscera. Bathing the patient with warm water, vinegar, or alcohol, will often give great comfort by relieving the burning sensation of the skin.

In the more severe cases the constant application of ice bags over the left iliac region gives comfort. Hot fomentations are sometimes to be preferred, but in the majority of cases the ice bag is better.

The severe griping and tormina are relieved quite readily by hot turpentine stupes, or by large flaxseed meal poultices. These may be used just as frequently and for as long a period as needed. In most cases cold applications are better.

Castor oil and magnesium sulphate, to the latter of which may be added dilute sulphuric acid, are most popular remedies. The salines, by their hydrogogic action, deplete the inflamed mucosa and wash away many of the infecting microorganisms. It must be remembered, however, all purgatives act as irritants to the intestinal mucous membrane in a greater or less degree, and their use must be guarded with judgment. In some cases they would be harmful. If there has been much diarrhea and the stools are copious and thin, purgatives are contraindicated. Calomel or calomel with ipecac is often ordered in small doses for a dry, furred tongue, inactive liver, with foamy, acrid discharges. The severe griping pains and tenesmus, the

diarrhea, and restless condition of the patient, when present, must be relieved, or the outcome will be rapidly adverse. Opium is the remedy, either in the form of Dover's powders, paregoric, laudanum, or morphine. This last is, no doubt, the most popular form of the drug, and is best used hypodermically. The dose should be just large enough to keep the patient quiet and to relieve the suffering, but never sufficient to produce narcotism. This remedy must be used most cautiously, and I might add sparingly.

A large number of intestinal antiseptics have been given internally for dysentery, the principal ones being calomel, lead acetate, zinc sulphocarbolate in one-half to three-grain doses. Salol, guaiacol carbonate, bichloride of mercury (dose, gr. $\frac{1}{120}$ - $\frac{1}{50}$), and acetozone.

Those cases which begin with symptoms of cholera morbus, with nausea and vomiting and subnormal temperature, call for hypodermic injections of morphine sulphate gr. $\frac{1}{8}$, and atropine sulphate gr. $\frac{1}{200}$. To control nausea, give acid carbolie and tr. iodine, of each m.l. well diluted by mouth. This is followed by calomel gr. $\frac{1}{8}$ - $\frac{1}{4}$, and salol gr. $\frac{2}{3}$, with just a sufficient amount of hot water to administer same.

In other cases cocaine hydrochlorate (gr. $\frac{1}{8}$ - $\frac{1}{2}$) may be given, and where there is much depression warm normal salt enemas may be given, or this may be given by hypodermoclysis. The effect is a dilution of the toxins and a reaction. A mustard plaster or hot turpentine stupes over the epigastrium are beneficial in these cases. If the temperature and pulse are not subnormal, the tormina, tenesmus and burning can be allayed by enemas of cold water, the temperature of which should be regulated to suit the case.

Martules claims that he found ipecacuanha to have an almost specific influence upon dysentery. His method of administering this drug was to give a one-half grain injection of morphine hypodermically and place a mustard plaster or turpentine stupe over the epigastrium. After half an hour twenty grains of pulverized ipecac was given, and this dose was repeated every half-hour to one hour until one ounce had been given.

Another method of giving this drug: Put 2 to 8 grams in 500 grams (1 pint) of water and let stand two hours. This solution is filtered off and constitutes the first dose, or this is at times divided into two or more doses. According to Kartulis, this always produces a diarrhea, but after a second or

third infusion, which is made from the remaining portion of the powder with the same quantity of water, has been taken, the vomiting and purging produced becomes less frequent.

If, after the third day's treatment with these infusions, the patient has not improved, another series of infusions with a fresh supply of ipecac should be given.

I mention this treatment only to condemn it. It has been known to produce death, and does not cure the disease. In all cases it is a cardiac depressant and lowers the physical resistance of the patient. It is a violent intestinal irritant. The powdered drug has also been found impacted in fatal perforating ulcers of the bowel. To my mind, therefore, its administration in this disease by this method is dangerous, adding insult to injury.

Injections of tepid water containing to each quart gtts. 10 to 20 of formalin and one tablespoonful of boric acid may be necessary. This is often followed by the same quantity of cold water or by the injection of one or two ounces of olive oil, and O.I. of bismuth subnitrate. These injections can do no harm, and are surely destructive to the life and propagation and pathogenic properties of the infecting agent.

If the symptoms do not abate and the patient does not obtain marked relief within the first few days of the use of the above described treatments, pathology will be present which may require other forms of local treatment in the nature of topical applications.

If the disease assumes one of the more virulent types, and if the ulceration is extensive, still more radical measures should be sought in the high irrigation with the formal boric solutions. These, if possible, should be given through a recurrent tube, since by this means only can a large quantity of the solution be used without distending the inflamed and ulcerated bowel to a painful or perhaps dangerous degree. Four to eight quarts of this solution are usually used in one irrigation.

One-half to one hour preceding the administration of these irrigations morphine (gr. $\frac{1}{4}$) hypodermically, or the introduction of a suppository containing cocaine hydrochlorate (gr. $\frac{1}{8}$ - $\frac{1}{2}$), extract belladonna (gr. $\frac{1}{8}$ - $\frac{1}{2}$), extract stramonium (gr. $\frac{1}{8}$ - $\frac{1}{2}$), will sufficiently relieve the spasms and tormina to enable the attendant to introduce the tube and administer the treatment in an effective manner.

Some authorities are partial to the use of quinin solutions (gr. 1-5000 to 1-500), in cases of amebic infections. Among the ad-

vocates of this drug are Musgrave, Strong, and Osler. H. F. Harris, of Atlanta, says: "I used this treatment with great persistence in some of my earlier cases, but not in a single instance was there the slightest perceptible result. Injections of 1-100 to 300 watery solution of bisulphate of quinin were somewhat beneficial in one or two instances."

My own experience with these injections is in accord with that of Dr. Harris. The use of formalin solutions in the strength of 1-500 to 1-1000 have, in the writer's hands, afforded the best results. My study of the effects of this chemical has extended over a period of ten years. I have relied not only upon clinical results obtained, but also upon the microscopic observations in demonstrating the efficiency of formalin. After only one or two injections with these solutions I have been unable to find any living organisms in the bowel for hours afterwards. This, it was observed, was not the case when other solutions were used.

Rapid healing of the ulcers was always noted while continuing the irrigations of the formalin in the above mentioned strengths. The dangers of overdistension of an inflamed and ulcerated colon are difficult to overestimate. To avoid this, I have devised a double or recurrent colon tube, made of soft rubber and constructed in such manner as to facilitate its introduction through the rectum into the sigmoid and descending colon. The tube having been properly inserted, it is an easy matter to change the position of the patient, and by so doing irrigate the entire colon.



In some instances the tube is obstructed by the rectal or rectosigmoid valves, which may necessitate its introduction through the sigmoidoscope or rectoscope. In chronic cases especially this difficulty has been encountered, since in these a fibrinous infiltration of these structures often exists, rendering almost impossible the use of an ordinary rectal tube. To ascertain whether or not the tube has coiled in the rectum, the operator can introduce the index finger, well anointed. After several unsuccessful attempts have been made, the proctoscope should be introduced and the tube inserted through it.

All subacute or chronic cases of dysentery depend for their symptoms upon an ulcerated and inflamed condition, which will not yield to ordinary treatment.

These cases have exacerbations and amelioration of symptoms. They often complain of constipation, which may extend through a period of weeks, or even months. It is in these subacute and chronic cases that the proctologist is most often consulted.

When the amebic infection has become very chronic, or has extended into all parts of the colon, beyond the use of the local measures just described, appendicectomy should be performed and the same irrigations practiced through the appendicial stump. The water is allowed to pass out through the rectum into the catch basin.

This plan of treatment was first advised by Dr. E. A. Corsons, of Savannah, Ga.

In 1898 Dr. H. F. Harris stated that some years before Dr. Corsons had made this suggestion to him, irrigations of the bowel with hydrogen peroxide through the artificial opening thus established, were also advised.

About the year 1901 Dr. Robert Weir, of New York, while performing a colotomy for amebic dysentery, anchored the appendix and irrigated through the stump with a saline solution. Shortly afterward Dr. Meyer, also of New York, performed a similar operation. Dr. Tuttle, of New York, conceived the plan of allowing the appendix to remain undisturbed after anchorage for a sufficient time (three or four days) to establish adhesions about the proximal end before cutting away the distal portion and using the appendicial stump lumen through which to irrigate with the desired solutions.

The writer has practiced this latter method and irrigated the colon with formal boric, H_2O_2 , copper, phenol, sulphonate normal salt and quinin solutions with most gratifying

results. It was observed, however, that the irrigations thus given did not effect a cure. Topical applications (per sigmoidoscope or rectoscope) were in all cases used in conjunction.

In two chronic cases the writer was forced to perform valvetomies on account of obstruction to drainage, and for the insertion of the proctoscope or even the tube beyond the valves, which were in juxtaposition and tightly stretched across the lumen of the rectum. This operation will rarely be found necessary.

DISCUSSION.

Dr. Cox (Helena)—I would not attempt to discuss this paper. The essayist has covered every detail in the most thorough manner, and there is not much to be said in the way of comment on the condition, except to indorse what he says in every particular.

Dr. Smith (Hot Springs)—While I do not wish to criticise the paper, I would like to disabuse the minds of the members of the society as to the practicability of irrigation through the stump of the appendix. As every anatomist or surgeon who has performed appendiceotomies know, that is absolutely impracticable, inasmuch as the appendix may come off at any point or place on the caput coli. Therefore, it is not always conveniently situated on the outside of the caput coli where it can be reached by the drain. I think irrigation through the first point of the ascending colon, above ileocecum, would be practicable, but not through the stump of the appendix.

Dr. Jelks—I will say I have one woman I have irrigated through the appendix for two years. For these very chronic cases I irrigate far up, as also through the appendix, with formal boric, copper, phenol, sulphionate, or saline solutions. No matter what treatment you adopt, you cannot hope to cure all of these cases, especially all of the chronic ones. I am sorry that mention was not made of the cutaneous manifestations referred to by me. This feature has not been mentioned before until I discussed it in Mississippi a few days ago. Dr. Haase, of Memphis, was present, and this feature was of course novel to him, he doubting the association being other than a coincidence, and he wrote to Dr. Fordyce, of New York, who in his reply mentioned two recent cases in which he had observed these skin manifestations or complications.

Some of the skin lesions were papular, others macular, and others pustular. These

lesions were staphylococcic, and have been observed in several of my chronic cases.

Whatever interest attaches to this feature as a complication of this disease, I am not prepared to state.

If you have complications in amebiasis, there is no use talking, you are going to have to treat your case surgically, for it is not a medical one.

THE CAUSATION, MODE OF INFECTION, PREVENTION AND HYGIENE OF TUBERCULOSIS.*

E. R. Dibrell, M. D., Little Rock.

The mortality of tuberculosis is greater than that of any other disease. One in every seven or eight people who die succumb to tuberculosis. The world is now beginning to awaken to the enormity of this stupendous death rate.

If we do not arouse to the sense of our insecurity, we may safely count on having hundreds of thousands of deaths, which by kindly caution and prevention might have been averted. Over one hundred thousand people are dying annually in the United States alone. It certainly appeals to all of us, that we should put our shoulders to the wheel and do our best in such a commendable crusade.

Records are found of it in the writings of Moses, while Hippocrates spoke of its prevalence and gave advice which has been only slightly changed. He directed his patients to go to the hills and drink goats' milk.

The name is derived from the word tuber, on account of its tendency in its process of growth to assume that form. Its ambition seemingly is toward the desire to form a tumor, like unto other growths found and denominated by that name. But the power to develop and assume definite tumor formation is curtailed because of the degenerative process which early sets in. It rarely grows larger than a small speck, about the size of a millet seed, or a small nut at most. Each nodule, or tubercle, gives off the material or germs to the near or remote neighborhood as the nidus for another and like growth, continuing thus to spread, perhaps at times by means of the circulation, at other times by the lymphatics, producing what may be a rapidly terminating disease. Usually, however, it is more insidious. It finds its start-

*Read before the public meeting on tuberculosis, at Pine Bluff, May 20, 1909.

ing point, say, in the apex of the lung. An irritation is started which excites the normal tissues to combat, eating cells and others from the blood current, and those which reside normally in the vicinity immediately begin to make efforts to throw around the point of irritation a protecting and enclosing wall, completely encasing it, at times succeeding in permanently isolating the poisonous germs which are the result of this irritation. There are no blood vessels developed in this attempt at tumor formation, consequently the inner portion of this conglomeration of cells, being cut off from all source of nutrition, a process ensues which we call degeneration, and since this appearance of the degeneration suggests the idea of cheese, we call it caseous. Any tuberculous mass which has had a great length of time to its credit undergoes this process of cheesy degeneration. If longer time be given it, a softening and liquifaction ensues, a bronchial tube is eaten into, and with the accompanying cough the mucus is expectorated which contains the germs that excite the malady. This spot spreads to adjoining areas, its dimensions increasing. New foci near by or distant become established, while at the same time a poison is being absorbed and distributed to the system, which poison excites the wasting process and fever which we all know so well. At times it is active, again dormant, the victim becoming impressed with the hope of improvement, which is frequently unjustified.

In 1882 Robert Koch announced to the world his discovery of the germ which today, with universal accord, is acknowledged to be the sole cause of tuberculosis. He found it in the diseased tissues and in the excretions of those tissues. It is a parasite, and grows and multiplies in the bodies of animals, cattle, monkeys, apes, rabbits, swine, birds, snakes—in fact, in domesticated animals generally. The creatures of the plain and forest, leading the life that nature devised for them, do not suffer with the affliction, but I may say few are immune who commune and have their habitat with men, because of their restricted environment they develop the susceptibility, viz., the necessary weakening of the tissues, which renders them liable to this character of infection.

The actual size of this germ is 1-10,000 of an inch long and 1-10,000 of an inch wide. The astonishing rapidity with which they grow is appalling. It is acknowledged that the sputum of one infected subject may dis-

tribute these germs daily by the billion. Outside of the body it can be cultivated and made to grow in specially prepared media, but it does not grow naturally in any particular soil or medium. It is a slender rod, often bent, and when long presents a beaded appearance, and under certain circumstances has a tendency to exhibit true branching. It behaves in a characteristic manner toward some of the dyes, and by reason of this affinity, at other times aversion, to certain colors, there is little difficulty in recognizing it and distinguishing it from other germs which it resembles. It grows best at the temperature of the body. Freezing temperature does not kill, but its life is destroyed at 150 degrees F. You observe from this point why we may be safe from liability of infection by boiling our milk and cooking our food. The saving grace of mankind from this germ, however, is due to the fact that the action of direct sunlight is fatal to it. This was shown by Koch, and has since been established by all other observers. If the light of the sun can gain access to these enemies of mankind for a short time they cease to have life, and we need have no further fear of them. As I have said, this bacillus has been definitely proved to be a necessary factor in the causation of tuberculosis, both in men and animals. The bacillus has been separated from the lesions in men and animals and in the sputum of man, and obtained in pure cultivation on specially prepared media; inoculation into animals of the bacilli obtained in pure cultivation produces exactly the same disease in the animals operated upon, from whom the disease may be transmitted on and on indefinitely. This plan of proving is known as Koch's law, and is the method pursued in establishing the relationship between any other disease and its causative germ. Some animals show an unusual susceptibility. For instance, the rabbit and guinea pig are easily inoculated, while the rat is inoculated with difficulty, and is said in consequence to be refractory. The rabbit and pig responding to a small or attenuated dose, while for the rat one must use a larger dose or of greater virulence. And so we argue with the human animal. Those of us who have inherited weak constitutions or have failed to avail ourselves of those means calculated to give us strong and healthy bodies have a less power to resist the germs when they are introduced into our bodies. There are few of us who have passed the age of sixty who have not.

in some form, battled, successfully or otherwise, with this great white plague.

Mode of Infection.—Many reliable investigators have observed from autopsies running up into the thousands that ninety-odd per cent of mankind beyond sixty years of age who have died of some other disease show unmistakable evidence of the fact that they, at one time, were tuberculous and have been cured. In other words, some of us are refractory to the germ. There are three ways by which the germ gains entrance to our bodies: By breathing it into our lungs, by swallowing it with our food and drink, or by inoculation. The bacilli-laden sputum expectorated from the lungs of a tuberculosis subject, after drying sufficiently to be thus transported, is borne to chests by the current of air which we inhale. If the soil there found is agreeable, it proceeds to reproduce its species and germs according to the law of its development. It throws out its poison, and the conflict which ensues between the germ and the normal tissues results in the formation of the growth of the tubercle. The fine spray of sputum coughed into badly ventilated rooms is dangerous, for in this manner the germs are distributed to the air we breathe. Numerous experiments upon animals, both by spraying the dried or the moist sputum, thoroughly establish this means of contagion.

The meat of tuberculous animals, or the milk of tuberculous cows, are likewise another prolific source of infection. Twenty per cent, and probably fifty per cent, of the cows which provide the milk for your dairies are distributors of the disease to the innocent babes of our land, who must of necessity use milk as their sole nourishment.

Much controversy has been waged as to this mode of infection, but now it is an accepted fact and cannot, I believe, be successfully disputed. Cows do not cough out their expectoration, but swallow the excretion from their lungs, their alimentary organs become diseased, so that their discharges distribute the germs to the soil and vegetation, thus affording means of infection for other animals, both brute and human. Oftentimes their udders have tuberculosis sores, which poison their milk, or, even though their udders be not affected, their milk is likely to become contaminated by debris so easily conveyed in the process of milking.

The inoculation process probably explains the presence of various tuberculous skin diseases, such as lupus or other varieties of tu-

berculous skin diseases, but the great majority of tuberculous cases are to be ascribed to the other modes of infection.

The more usual methods of infection in man, then, are by way of inhalation and of ingestion.

Speaking generally, ingestion tuberculosis is a disease of childhood. In cases where there is tubercular ulceration of the intestine or tuberculosis of the nearby lymphatic glands or peritoneum, and no involvement of the lungs, the mode of invasion may be presumed to have been by way of the mucous membrane of the intestine. Fortunately, probably, for all of us, the acid juices of the stomach destroy the bacilli taken in with our food. But in cases of inferior digestion or upon failure to secrete sufficient acid with our stomach juices, the germs may pass into the alkaline intestines where they grow. The infant is not so strongly fortified as the adult in this special respect, and becomes a more ready victim. It makes no difference how it enters and where it commences its invasion, once it has gained a start it is liable to spread to the entire system.

Its Cure and Prevention.—Thus I have drawn to you the picture of infection. I suspect that more of you are interested in its cure. Now, if reliable autopsical statistics prove that nearly all of us have at some time had tuberculosis in some form or other, and may have lived out our natural life to succumb to some other disease, it follows by reason that tuberculosis is in many instances curable. But better than *curing* is *prevent*. It is evident from what has been said of the sources of infection that they are all preventable.

As regards the milk and meat, public regulations for limiting the supply of milk to that from healthy cows and preventing the supply of meat from diseased animals are necessary, and would no doubt remove meat and milk from the list of sources of infection. Such laws are with difficulty secured, and frequently are imperfectly obeyed. But the danger from meat is obviated by cooking. Milk infection is prevented by Pasteurization and boiling. We have a ready means of detecting tuberculosis in cattle, and cattle found to be infected should be destroyed.

In the case of human beings, people should be taught the necessity of proper disposal of their sputum. No law can be enacted that will make them do so, but as soon as tuberculous individuals can be made to understand that the sputum they bring up is likely to be

a source of danger, not only to those surrounding them, but to themselves, and that the danger can be obviated by a little care, they will doubtless heed and resort to the necessary precautions. Consumptives and those living with them should know that expectoration into proper kinds of cuspidors, filled partially with water, a pocket flask, a pasteboard purse, or a muslin rag, are the best precautions against tuberculosis. The spittoon can be emptied into the sewer, observing the strictest regard for disinfection; the pasteboard purse can be destroyed by burning. Cheap muslin, cut up into square handkerchiefs, should be held before the mouth when coughing. If the sputum is expectorated in these or the pocket handkerchief, they should be boiled or burned before the sputum on them becomes dry. They should be carried in separate pockets lined with some impermeable material, which pocket may be easily disinfected. When the consumptive is thus conscientious in the disposal of his expectoration and during the act of coughing, he is an individual to associate with as anybody else.

Is Not Hereditary.—Tuberculosis is nowadays not regarded as a hereditary disease, but there is a predisposition to it, that is to say, a weakened constitution, which can be transmitted from parents to child. Children contract tuberculosis during childhood from careless parents or nurses. It frequently shows itself as an enlargement of the glands of the neck and other characteristics, called in the old times scrofula. If they have inherited the predisposition, every means should be adopted to cultivate in them healthy bodies, such as are produced by fresh air, healthful exercise, and good, wholesome food. The custom of kissing children in the mouth should be abandoned. Not only do they contract tuberculosis by this means, but other diseases of which they die.

Tuberculosis, especially of the pulmonary form, is one of the most curable of diseases. When discovered early and treated early, as many as seventy-five per cent get well, and some statistics are even better still, simply by scientific and judicious use of fresh air, rest, abundant and good food, milk, eggs, meat, vegetables and fruit, and the help of certain medical aid at times to combat and control complications, when the hygienic and

dietetic measures do not in themselves suffice. There is no doubt that certain climatic conditions are helpful. They do not cure unless the patient be carefully controlled, and at all times breathe all the fresh air he can get, digest and assimilate all the good, nourishing food of which he is capable, and rest, rest, rest. There are few who know, unless they have been taught, how to apply these curative measures, and the well-trained physician is the one who is able properly to instruct. There are many who are unable to provide themselves with these requisites of cure. Therefore, the modern sanatoria are being established throughout the world. The first in this country owes existence to Dr. Trudeau, of Saranac Lake. The last, but not least, has been provided for by the liberality of our own state government. Many of these sanatoria receive patients gratuitously, but there are not enough public or private sanatoria to receive patients who require sanatorium care. I prefer that all of my tuberculosis patients have sanatoria experience, that they may be instructed and made to practice and carry out the hygiene of tuberculosis. They are there under discipline and become habituated to observe all the rules and impart it with enthusiasm to others wherever they go.

No Specific Medical Cure.—Though we hope some day for a specific medical cure, as yet it has not been realized. *There is absolutely no medicine known to man that exercises a curative effect.* The consumptive should say to all quacks and nostrums what our Savior said to Satan on top of the high mountain when Satan promised to Him so much. We had hoped for a cure in tuberculin. Tuberculin is, in short, the glycerine extract obtained from the cultivated germs. My personal experience is averse to its use, except as a diagnostic measure. Patients look to tuberculin to do for them what it cannot, but what fresh air, food, rest and congenial company may do. They thereby neglect the things of essential importance to restore them to health.

Let us all become crusaders against this pest that destroys so many human beings. It is a war that peace congresses commend. It is an effort to do good and save life. By combined and practical work it is possible to stamp tuberculosis from the face of the earth.

SOME CLINICAL OBSERVATIONS IN DOING MASTOID SURGERY—WITH DEMONSTRATIONS.*

Robert Caldwell, M. D., Little Rock.

There are two reasons why I chose this subject for discussion:

First. There is such a tendency among a great many of the general physicians to view the presence of suppurative otitis media lightly, and pass the condition by with the expectancy that all will be well, regardless of treatment.

Second. The belief, as held by quite a few physicians and surgeons, that the operation for acute mastoiditis is a very simple affair.

Before reporting any clinical cases, I wish to rehearse, in a brief way, the most important indications for the mastoid operation. Not for the sole purpose of bringing out the diagnostic points in this condition, but that it may be a review to some here, thereby enabling us to follow the reported cases more beneficially.

The indications for the mastoid operation, as I see them, are:

First. The history of the case. How long has ear been discharging? Disease present before discharge? Ear break, or was it punctured? Did pain quit then, or still continue? What treatment have you had?

Second. Discharging ear.

Third. Pain in ear.

Fourth. Pain and tenderness behind ear and over side of head.

Fifth. Fever; history of this fever; does it continue or fluctuate in twenty-four hours?

Sixth. Postauricular subperiosteal swelling, gotten by comparing the postauricular folds on each side. I consider it a very important symptom.

Seventh. Bulging of postsuperior canal wall next to drum.

Eighth. Location of perforation.

Ninth. Character of discharge; mucoid or pus; and nature of pus, staphylococcus, streptococcus, pneumococcus, or T. B., etc.

Tenth. Blood examination; leukocytosis, or not?

Eleventh. Last, but not least, symptoms of brain involvement; as localized brain symptoms, nausea, vomiting, dizziness, etc.

Although the above are all prominent indications for the mastoid operation, we would

not expect to find them all exemplified in every mastoid case; neither would we expect to operate on the first appearance of one, or even more, of these symptoms. I would not have the society believe that I would advise an operation on every patient that had tenderness over the mastoid during the first three or four days of an attack, for the reason that in the milder cases it is quite possible for drainage through the aditus, combined with local absorption, to effect a cure without operation; and, further, it is deemed safer to operate after nature has thrown out some protective limitation to the disease within the mastoid cells. The time for operative interference always depends upon a satisfactory diagnosis of a destructive purulent process within the mastoid cells. At just what moment those cells should be opened and curetted cannot be measured by days, or by any special symptom; but whenever a permanent remission of symptoms has not been effected, either by drainage through the drum membrane, rest in bed, absorption, or the employment of sufficient local measures, the mastoid operation should be performed, always remembering that we should never waste time by depending on absorption or drainage, or nature to throw out some protective barrier when we have symptoms of (1) brain involvement, (2) facial paralysis, (3) an acute exacerbation grafted on a chronic process, and (4) when nausea, vomiting, or vertigo tells us we have an involvement of the labyrinth.

I wish to report three cases that recovered and two that did not, with which I have been connected during the last fifteen months.

William C., *et.* 33; farmer; married. Had measles, followed by otitis media; ear drum punctured by family physician before it discharged. I saw case one week later; profuse discharge from left ear; posterior superior canal wall sagging very prominently; pain and feeling of fullness over left side of head. No fever; no mastoid tenderness; slight subperiosteal postauricular swelling. I treated the case one month by irrigations, powders, and with suction syringe; punctured ear drum twice in the meantime. An operation was advised, based on the following indications: Profuse purulent discharge, with history; pain, very severe over whole side of head, so much so that patient could not sleep at night without hypnotics; bulging of posterior superior canal wall; loss of weight (patient had lost twenty pounds in one month).

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

Operation accepted. Simple mastoid operation; antrum and whole mastoid cavity completely filled with pus. It was almost impossible to conceive of this condition existing without either tenderness or fever. This case is reported to show that we may have an extensive suppurative involvement of the mastoid cells without mastoid tenderness or fever. Cells and antrum were curetted and wound packed with iodoform gauze. Patient made a rapid recovery.

Case No. 2.—Helen B., æt. 7; female; had measles two weeks before, followed by otitis media of one week standing. When seen had (1) discharge from ear, yet not so profuse; (2) pain in ear and on right side of head; (3) swelling and tenderness behind ear; (4) bulging of posterior superior canal wall; (5) temperature, 105; continuous; did not intermit nor remit; (6) no localized brain symptoms.

Operation advised and accepted; antrum opened; hardly any pus found; antrum full of granulation tissue; cells partly invaded by granulation tissue, which were thoroughly curetted. On account of gravity of the case and no pus cavity found, the lateral sinus was exposed, but, on being found healthy and showing no evidence of a thrombus, was not opened. Wound packed with iodoform gauze and bandaged. Patient died in thirty-six hours.

This was one of those cases that showed almost all the characteristic symptoms of a mastoid involvement, yet operation did no good, because the inflammatory process had most likely extended to the meninges before nature had a chance to throw out any protection, and patient died from meningitis; not localized, but diffuse.

Case No. 3.—Mamie S., æt. 50; female; single; had had a chronic suppurative otitis media for fifteen years. Would be free from trouble for two or three years at a time, then discharge would show up again. In February, 1908, left ear began discharging with profuse, foul-smelling discharge. Had all the characteristic signs of mastoiditis, discharge, pain, tenderness, swelling, fever, etc. Operation was delayed longer than usual on account of very marked albuminuria. After continued treatment, urine was almost free from albumin, and operation was advised and accepted. Radical mastoid operation done. Antrum, mastoid cells and attic full of pus; bone over tympanum caseous, which was removed easily with curette, thereby exposing the dura. This dura, looking un-

healthy, was punctured, and, on finding pus, was freely incised, thereby liberating about half an ounce of pus. Wound dressed with iodoform gauze. Patient made a very slow and tedious recovery; four months elapsed before she was dismissed.

I report this case on account of the epidural abscess, to show the importance of following out diseased conditions and not quitting an operation before we have done our operation thoroughly.

Case No. 4.—Miss S., æt. 30; female; single; referred to us by her family physician, who had been treating her for two weeks for suppurative otitis media. Examination showed (1) profuse discharge from right ear; (2) would acknowledge to some pain in ear, but said it did not hurt much, yet went around with hand over right side of head all the time and could not sleep at night on account of this uneasy feeling in the head; (3) tenderness over tip of mastoid; (4) postauricular subperiosteal swelling; (5) bulging of posterior superior canal wall; (6) fever; temperature ranged around 101 degrees. Operation advised and refused; patient went home, dismissed family physician; procured new doctor, who treated her for malaria and rheumatism. In two weeks Dr. Knapp was called over phone to come prepared to do mastoid operation. On arrival found patient with temperature 105.5; pyemic ulcers in left elbow and left ankle, Mastoid was opened; antrum and mastoid found full of pus; lateral sinus completely thrombosed; cells curetted and sinus opened; patient died in twenty-four hours. This was one of those cases where we have good reason to believe that a timely operation would have saved a life.

Case No. 5.—Mrs. B.; female; widow; æt. 31; had been treated locally for suppurative otitis media for last four months, during which time drum had been punctured twice by a thoroughly competent man. Patient had lost twenty pounds and suffered intense pain at frequent intervals. On examination a profuse purulent discharge of right ear was found; pain in ear and right side of head; pain and tenderness behind ear; tenderness particularly behind tip of mastoid; postauricular swelling; bulging of posterior superior canal wall; temperature 101 degrees. Operation advised and accepted. Antrum and mastoid found full of pus, and, in curetting over lateral sinus, curette dropped, without resistance, into a large pus cavity, which emitted about an ounce of thick, creamy

pus. This cavity was located in the region of the sigmoid sinus, thoroughly walled off with granulation tissue. Cells were all thoroughly curetted. This pus cavity was slightly curetted and wound packed with iodoform gauze. Patient made a speedy and uninterrupted recovery.

This case was of four months' standing, and this pus cavity was not of a few days' formation. Had this case not been operated on, much more grave results would surely have followed.

Now, a few words regarding the mastoid operation. I shall not attempt to go into details concerning the operation, yet I do wish to speak a few words concerning the dangers of an operation for mastoiditis. Through the kindness of the College of Physicians and Surgeons, of Little Rock, I was given a head that I might perform the radical mastoid operation on one side, exposing all the danger points, thereby showing how important it is in mastoid surgery to acquaint one's self with the anatomy of the region.

On the other side I have done the simple operation as I think it should be done, without interfering with any of the danger signals—i. e., facial nerve; lateral or sigmoid sinus, or jugular bulb; carotid artery; semicircular canals, labyrinth, or meninges. Some of you will say that accidents are likely to happen in the experience of the best operator, be he experienced or not. That is very true; the best of men are liable to break into the lateral sinus, or cut the facial nerve at some time in their operative career, especially if there is a deviation from the normal, as often happens. Yet, one familiar with the parts in their normal relations will be more able to steer clear of danger lines and be better qualified to deal with abnormalities and complications when found.

I have this specimen here for your inspection, and shall be glad to have any of you come forward, examine it, ask questions and express opinions.

Before I close, I wish to state that the burden of responsibility in our otitis media cases will largely rest upon the judgment of the family physician. His ability to recognize initial lesions, puncture a drum when bulging, ere the inflammatory process has invaded the mastoid cells, give sufficient treatment during the first of the discharge, will to a great extent control the number and destiny of our mastoid cases.

I wish to take this opportunity to appeal

to the physicians present, and through them to the profession in general, to equip themselves with sufficient instruments and acquaint themselves of sufficient knowledge concerning ear diseases that they may be proficient in aural examinations to the extent that they will know a bulging ear drum when seen. Also, always to remember the ear when meeting an obscure condition, and see if the ear could possibly be the seat of the pathological manifestation, which we will oftentimes find, especially in children. All this may be done by the outlay of a very small amount of money indeed, and a little perseverance in examining the normal ear. Then some day he may be able to save a patient a mastoid operation by a timely paracentesis.

A few words regarding this specimen. I have no abnormality to exhibit. I wish to just show by this specimen the danger one is liable to get into by doing the mastoid operation.

[Note.—Dr. Caldwell gave demonstration on cadaver of methods described in his essay, stressing the safeguards and danger points.—Editor.]

REPORT OF INTERESTING CASE OF ABDOMINAL SURGERY.*

George S. Brown, M. D., Conway, Ark.

If experience in this branch of our art teaches anything, it teaches that the most painstaking and scientific diagnosis may be completely upset at the first stroke of the knife through the peritoneum. The greatest surprises of abdominal surgery occur most frequently in one's early days of abdominal operations.

"With riper knowledge, the typical cases become more rare, and we learn not to be surprised at any condition found within the peritoneal cavity, however interesting or unusual it may be."

It is wise not to be too sure of what will be done at an operation, and embarrassment may arise from promises made the patient or friends as to the exact nature of the contemplated procedure. The following case was an extremely interesting one, and, I think, of sufficient interest to warrant careful record and consideration:

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

Mrs. B., white, æt. 32, married, but had never been pregnant. Menstruation began at fourteen; was of the twenty-six day type, always regular, but painful, until within the last year, has been irregular and scant. She had suffered for about two years with frequent pains in the right lower quadrant of abdomen, a dull pain and "sense of weight" in hepatic and gastric regions. She was very nervous and had a poor appetite and digestion, but was not very much emaciated. She had been the subject of long continued and varied treatment, but nothing had been of any avail for her relief. During the year before I saw her, she noticed an abdominal enlargement, which had rapidly increased. When I first saw her, July, 1906, she was constipated, nervous, low-spirited, and the abdomen greatly distended. Physical examination revealed a large accumulation of fluid in the peritoneum, abdominal wall was tense, and after careful examination a diagnosis of probable ovarian cyst was made. With the patient lying on her back, there was flatness on percussion in front and on the right side, with a tympanitic resonance on the left side. Nothing positive could be determined from vaginal examination. The temperature was 100.2 F.; pulse, 100 to 110; no jaundice present; urine, sp. gr., 1.020, acid, no casts, bile, albumin or sugar found; small amount of indican present. Saw her again in August, with Dr. Westerfield; condition much the same. The former diagnosis was thought to be correct. Advised operation as only hope for relief. The case was not looked upon as one favorable for operation. Operation was performed at her home, twenty miles in the country, on September 5, 1906. The abdomen was opened in the usual manner; an incision was made in the middle line midway between the umbilicus and the pubes. Following incision, about three and one-half gallons of light straw-colored fluid escaped. The peritoneum was found to be very thick, of a gray-reddish color, giving the indication of a chronic exudative inflammation. The liver was found very large, extending down to with two inches of the pubic bone, filling the right half of the abdomen and extending about one and one-half inches to the left of the median line. Surface was smooth and hard; no nodules; edges rounded. White sugar-like spots found on outer surface of liver. No gallstones were found in gall bladder or duct. Abdominal wound was now enlarged to obtain free access to the parts. A cyst of left ovary, size of a lemon, was

found. In an effort to remove it, it was ruptured. Uterus, right ovary and tube normal. A careful search of the peritoneum, intestines, liver, spleen and all the abdominal cavity failed to find tubercular nodules. There was nothing to remove, so proceeded to close abdominal wound. After I began the closing of the peritoneum, I decided to stitch the omentum into the abdominal wound, as Talma did for atrophic cirrhosis of the liver, with ascites. Three stitches were put in the omentum, attaching it to the parietal peritoneum and into the abdominal wound. Wound was closed in usual way by layers, with continuous catgut sutures. As the Talma operation was discovered by accident, and at first, not knowing how it cured his patient, I thought it possible we might derive some benefit by establishing hypemia and collateral circulation. This appeared to be the only thing one could do. She made an uneventful recovery, wound healing by primary union. The abdomen partly refilled with fluid and was absorbed and did not return, as it often does in tubercular peritonitis. The liver soon began to decrease in size, and in three or four months was normal in size. She has remained in fair health since. On March 23, 1909, two and one-half years since the operation, I had a report from her physician "that she was in good health, attending to all her household duties, and a few days before had a fight with a neighbor woman, in which she came out victorious."

I would like to ask if this was a case of tubercular peritonitis, complicated with cirrhosis of the liver, which is of frequent occurrence in the atrophic form, but very rarely complicated with hypertrophic cirrhosis. Ascites is very rare in the latter, some authorities claiming that it never occurs. The very rare cases in which it supervenes after the long continuance of biliary cirrhosis, and if it is well developed, the prognosis, according to Osler, Thompson and Hare, "as to cure is hopeless." If not due to hypertrophic cirrhosis of the liver, what was the cause of the enormous enlargement of the liver, and how did the operation cure her? I am under many obligations to Drs. Westerfield, Hardy, Kessinger and McCollum for valuable assistance at the operation.

DISCUSSION.

Dr. Meek—Dr. Brown's paper is a valuable contribution to the surgery of the liver, although he is (all honor to him) can-

did enough to admit his mistake in diagnosis. The doctors who never make mistakes are all dead or yet to be born. His case, to my mind, was one of hypertrophic cirrhosis of the liver, as such are not usually due to alcoholism, and we could not accuse a female of such weakness, though the latter part of her personal history (her fistie exploits) might justify such a suspicion. But cases of hypertrophic cirrhosis usually have only a light jaundice until late in the disease. Attacks of pain, like gall-stone colic, are frequent, as also symptoms of indigestion, etc. Anders, in his *Practice of Medicine*, edition of 1902, mentions cases of hypertrophis cirrhosis that have been cured by epiplopexy, as he calls it, or suturing the omentum to the abdominal wall. This form of cirrhosis sometimes terminates in the atrophic form, but the failure of the ascites to permanently return and her improved health, together with her successful pugilistic exploitations, as recorded by Dr. Brown, would suggest that she was about as nearly restored to health as the ordinary married woman should be. The cure is no doubt due to the establishment of a collateral circulation, as stated by authorities on this subject, and while, as Dr. Brown says, this was discovered by Talma accidentally, it should teach us all to observe more closely the resources of nature unaided by man, and we should, with all our boasted wisdom, remember, in the words of Polonius, that "there are things in heaven and on earth never dreamed of in our philosophies." I have nothing but words of praise to say concerning this interesting report.

REPORT OF TWO CASES OF RAYNAUD'S DISEASE.*

Thomas G. Brewer, M. D., Osceola.

In the presentation of the cases herein recorded, no effort has been made to throw any light on the pathology of this particular affection, or to suggest anything new as to the treatment, the purpose being only to emphasize the fact that, in an observation of upwards of thirty years, these are the only cases that ever came to my immediate care and with one exception, all that I have seen reported. Apart from the peculiarity of the disease itself, the singular thing about the two cases I report, was the almost exact similarity of all the conditions entering into them. The ages of the patients, their environment, the history of prior troubles, and the course and duration of the disease, was so much alike, that a description of one, or either one, would be a good description of the other. The patients were negro women, farm hands, aged between 28 and 30 years. Neither had ever been married. They did not belong to the better class of negroes, but to that class who drift about from city to farm as occasion requires, and work can be obtained. Badly clothed, badly fed, and badly nourished, with no attention to cleanliness, and actuated only by a desire to appease the bodily appetites, and to sleep, and this attained,

they had reached the goal of their ambition. There was no history of specific infection, nor did an examination of the skin, the throat, the glands of the neck, the scalp, or the shafts of long bones, present any evidence of such. Menstruation had made its appearance at 14 years, and had been about normal. They were attacked with chills and fever, of the third-day type, which lasted a week or more before they came under my care, and it was about a week before the chills were broken and the fever gone. It left them in a debilitated state and they were placed on a tonic of quinin, iron and strychnia. Some two or three weeks after their recovery from the chills they were attacked with dysentery of a severe type, which yielded but slowly to treatment and left them in an adynamic condition with almost complete anorexia and general debility. The tonics, with concentrated food, were pushed as best I could, but with little success, or improvement, when about ten or twelve days after the dysentery had been overcome, I was sent for and told that they were suffering with a severe coldness of the feet and hands. They had the feet and hands wrapped up in woolen rags, and although the weather (August) was exceedingly warm, they said they felt as if their lower extremities were freezing. I could detect nothing peculiar on close examination of the feet and hands, and concluded it was some nervous phenomena, and gave an opiate to quiet, and ordered epsom salts to clear out the bowels well. The cold sensation lasted about twenty-four hours and gradually ceased, and then they noticed that there was no feeling in the skin of the feet and up to the calf of either leg, and the hands up to half way to the elbow. In thirty-six to forty-eight hours the line of demarcation was well established, and at the end of a week I removed, with scalpel and scissors, all the skin from the affected surfaces. The muscular structures underneath had a reddish-bluish appearance, a terrible odor, with a small amount of watery effusion, no pus. There never was any tendency to heal, and practically no feeling in the affected parts, which were the feet up to the calf of the legs, the hands up half way to the elbows, and a circular spot two and one-half inches in diameter covering the elbow. The treatment was supportive and antiseptic, with especial attention to the nervous system and the secretions, but nothing availed and the general prostration gradually increased until death from exhaustion, pure and simple. The temperature was subnormal from the time of the sensation of coldness of the hands and feet, ranging from ninety-five to ninety-seven and one-half degrees. the urine was scanty and albuminous. Heart action weak, rapid but regular. Skin dry, as a rule. No pain was complained of and at no time, until a few hours before death, was there any delirium or loss of consciousness.

The foregoing is an unvarnished statement of the cases as they presented themselves to me, without comment. But little is said about the disease in the literature at my command. Raynaud, of Paris, in 1862, gave the first description of it, and offered a theory as to its pathology. The consensus of opinion is that it is of neurotic origin. Raynaud claimed that the local syncope was due to the contraction of the arterioles and capillaries. Weiss thinks the veins are the seat of the contraction. Whatever the cause, the result is gangrene from blood being cut off from the skin, and since the circulation is dependent on nerve force, always, it follows that primarily, the trouble must be in the nervous system, and leads us to believe that every particular part of the circulation is under the influence of and dependent on a peculiar nerve center for its proper performance, and we must be in the dark until we know more of cerebral localization.

*Read before the Mississippi County Medical Society. July, 1909

SEPARATION OF LOWER EPIPHYSIS
OF RADIUS.

T. F. Kittrell, M. D., Texarkana.

This short paper is prepared with the hope that the writer may profit by the experience of the other members of this society. The date of the appearance of the ossification centers of the epiphyses of bones varies to some extent, as also the date of the union of these epiphyses. The Roentgen Ray has taught us much. Ossification appears in the lower epiphysis of the radius at the age of two years. Union takes place during the nineteenth or twentieth year. The synovial membrane of the wrist joint does not touch the epiphyseal line of the radius either anteriorly or posteriorly; it takes its origin from the lower articular margin of the epiphysis.

The synovial membrane of the inferior radioulnar articulation extends above the epiphyseal lines of both radius and ulna, and is loosely attached to the diaphysis of both bones, so that in epiphyseal separation the wrist joint may be opened, but is not necessarily so. In this injury the line of separation usually follows the line of union between bone and epiphysis, or may partially do so, and then pass through cartilage, or may involve part of the bone; the periosteum is usually stripped loose from the bone.

The injury is usually caused by a cross breaking strain, usually just as a colles fracture is caused, viz., by a fall on the outstretched hand. This produces deformity almost exactly like a colles fracture, except that the displacement is nearer the wrist and the pain is much less. The X-Ray will show the exact nature of the lesion. The prognosis is made graver because of the fact that in some cases arrest of growth of the bone takes place, caused by premature ossification of the cartilage. Stimson reports two such cases, and says that it takes place oftenest in those epiphyses that take the greatest part in growths of bone as upper end of humerus and tibia and lower end of femur and radius at age of fourteen years; they produced a late deformity resembling a very bad colles fracture.

In some cases the patient falls on the back of the hand in such a manner as to bring about extreme flexion. The epiphysis slips forward, the end of the upper fragment projects backward, while the hand is more or less flexed; there is less pain in all these epiphyseal separations than in a fracture.

The treatment is the same as in a colles or reversed colles fracture; that is, perfect reduction, if possible, as it has been shown that premature ossification with failure of growth often follows where reduction is not complete. After reduction, then use any form of splint which immobilizes the bone above and below the fracture. Personally, I use in most of these simple colles fractures, as well as this case I report, two heavy pasteboard or light wooden splints; the latter by preference.

The posterior extending from near the elbow to the metacarpo-phalangeal articulation, the anterior from about an inch below bend of elbow to middle of palm hollowed out to fit the thenar eminence. These splints should be padded to fit the arm, the posterior splint padded evenly fits without trouble. The anterior needs quite a pad of sheet wadding to make it fit the radius just above its lower end. These splints should be worn from four to six weeks.

Report of Case—This case, Wooten Harris, aet. thirteen years, on September 22d fell while carrying on some gymnastic performance, striking on the back of his flexed right hand. He thinks he fell several feet. I saw him a few minutes later. There was a decided forward displacement of hand and lower end of bone, which the fluoroscope showed to be a displacement forward of the epiphysis, the upper fragment slipping backward, but not enough to completely override. Without an anesthetic and with the aid of the fluoroscope, I was able to reduce it without much trouble to myself, but with a good deal of pain to the patient. There was no crepitus. I put on light wooden splints, as above described, leaving them both on until October 24. The following week I kept the posterior one on, removing it on October 31.

Had I known that I would present this case. I would have made a radiograph at time of injury, showing the deformity and position of fragments.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

MEDICAL STANDARD RAISED IN ARKANSAS.

The act of May 6, 1909, which went into force on August 6, last, possesses undoubtedly the possibility of elevating the medical profession in this State. An uplift of this kind must, in order to be just and equitable, come about by evolution and not by revolution.

The act provides for this elevation in three ways. First, by raising the initial standard to practice medicine. Second, by recognizing only such physicians from other jurisdictions whose standard is equal to that of this state. Third, by giving the State Medical Boards power to revoke license of such physicians who do not maintain ethical standards in their practice.

The success of this law will depend, like any other law, on its enforcement and on the medical profession itself will depend the enforcement of the law.

The new act provides substantially, the same as the original act, for the admission to practice medicine. Three state boards are constituted representing the three schools

of medicine, namely: the homeopathic, regular, and the eclectic schools. These boards are, of course, made up from the physicians of the state of their respective schools or systems of medicine.

The responsibility of admission to practice will, therefore, rest primarily on that portion of the profession which chance to be serving on the respective boards.

The law itself provides that "The applicant shall present to the board satisfactorily evidence of graduation from a reputable medical school." The boards are therefore relieved from passing on any applicant who has not passed through a regular course of study. The act defines a reputable medical school as follows: "A school shall be considered reputable within the meaning of this act whose entrance requirements and course of instruction are as high as those adopted by the better class of medical schools of the United States." An examination of the requirements of admission to the various medical schools in this part of the United States shows a comparative excellent standard.

In the South and Southwest seventeen medical colleges comprise the Southern Medical College Association, among which are Arkansas' two medical schools. The minimum preliminary education required by the Association to enter these colleges is a grammar school education and two years successful attendance at a recognized preparatory school or a high school or its equivalent, this equivalent to be determined by a superintendent of public instruction.

To be classed as a reputable medical school and thereby obtain admission for examination of their graduates, it is necessary for medical schools to make their entrance requirements conform to the Southern Medical Association standard or its equivalent. Ostensibly the standard of admission to our medical schools is sufficiently high, but practically speaking, who ever heard of any student regardless of preliminary education, being denied admission? Under the provisions of the new law it is probably not beyond the power of the examining boards in determining what schools shall be classed as reputable, to look into the actual standard of the preliminary education required and not merely at the announcement in its catalogue. This might create consternation indeed. The colleges can, however, relieve their own embarrassment and the disagreeable duty

of the boards by living up to their own standard, not in theory, but in practice.

The law further provides: "The boards may, at their discretion, arrange for reciprocity in license with the authorities of states and territories having requirements equal to those established by the boards." The boards will, therefore, be required to examine into the initial requirements in other states to practice medicine. This provision of the law is sufficiently broad to permit a wide range of professional etiquette and at the same time afford protection from foreign quacks.

The act imposes the responsibility for the admission to practice upon the various boards. Only such men as are fitted will presumably be permitted to enter the practice. The standard for admission is higher than heretofore and the result will be that gradually the personnel of the medical profession will be better. But the maintaining of this standard, when once a physician is admitted to practice, rests with the profession at large.

The act provides: "The boards may refuse to grant or may revoke a license for the following causes, to wit:

- (A). Chronic and persistent inebriety.
- (B). The practice of criminal abortion, either as principal or abettor.
- (C). Conviction of the crime involving moral turpitude.
- (D). Publicly advertising special ability to treat or cure chronic and incurable diseases.
- (E). The representation to the board of any license, certificate or diploma which was illegally obtained, or the practice of fraud or deception in passing the examination. In complaints for violating the provision of this section, the accused person shall be furnished with a copy of the complaint, and given a hearing before said board in person, or by attorney, and any person after refusing or revocation of license, who shall attempt and continue the practice of medicine, shall be subject to the penalty hereinbefore described."

The boards, of course, will be able to take cognizance of only such irregularities in practice as are presented to them. To maintain and elevate the profession, it is, therefore, incumbent upon physicians themselves to present to the boards in proper form such acts of violation of the law as come to their notice. Upon the presentation of a proper cause, it is the duty of the boards to hear and determine the charges. This last provis-

ion of the law rests upon the profession at large. Upon its enforcement depends the elevation of the professional standard in Arkansas.
J. A. T.

THE ACTION OF CHLOROFORM ON THE KIDNEY.

Far from being always inoffensive, chloroform possesses a pronounced noxious action, and the lesions it produces in the liver and the violence of the hemolysis that it causes are well known. It exerts its bad influence on the delicate parenchymata, foremost among them being that of the kidney. In a recent thesis (Paris, 1908), Stankiewicz has shown that renal changes are encountered with great frequency after the administration of chloroform. After anesthesia with this drug albumin is found, also casts and various abnormal urinary sediments, all of which indicate the presence of a mild nephritis, which, however, is usually temporary. After the administration of chloroform there is, both in man and in animals, a diminution in the quantity of urine secreted, after which there is a compensatory increase, so that usually the urine is greater in amount than before chloroform was administered. When the amount of chloroform given is very considerable, the diminution of the urinary secretion lasts for a number of hours after the operation, and in some cases there may even be anuria.

The influence of the administration of chloroform on the quality and quantity of the urine secreted appears to be principally due to a direct action of the anesthetic on the glandular epithelium. In point of fact, autopsies made on both animals and men who have died after chloroform anesthesia have often shown degenerative lesions in the tubuli contorti. Thus the noxious action of chloroform upon the kidney may explain the cause of death occurring several days after anesthesia with this drug. In order to avoid the bad effects of chloroform on the kidney, active diuresis should be produced after chloroform has been administered, and all operations requiring a protracted anesthesia must be avoided in those instances where there is a renal lesion of long standing. Anesthesia with chloroform is, under these circumstances, dangerous, and ether should be used instead. In renal and hepatic subjects anesthesia with chloroform should always be of short duration, for otherwise serious results may occur.—N. Y. M. J., August 7.

REPORT OF STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY.

I herewith submit the following report of our recent examination:

Total number of applicants examined, 85, 74 of whom were white, 10 negroes, and 1 Chinaman. Class was composed of 32 graduates and 53 non-graduates. Total number of applicants passed, 39, 20 of whom were graduates, with 19 non-graduates. Among our failures were 10 graduates, with 36 non-graduates.

List of questions used at this examination:

CHEMISTRY.—1. What is carbon, and in what forms found? 2. What is CO_2 , how prepared and how used in medicine? 3. Give chemical formula of boron compound most used in medicine. 4. Define deliquescence and efflorescence. 5. What is collodium, and for what used? 6. Give two tests of sugar in urine. 7. Define magnetism, galvanism and faradism. 8. What is hemoglobin, and under what condition does it appear in the urine? 9. Give treatment of poisoning by lead salts. 10. Complete the following formula: $\text{CaCO}_3 \times 2\text{HCL}$ equal to?

PHYSIOLOGY.—1. What is the normal proportion of blood to body weight? 2. Describe the blood. 3. Describe an artery; a vein. 4. Describe the mechanism of respiration. 5. Describe the stomach. 6. Describe the portal circulation. 7. Describe the renal circulation. 8. What are the functions of the cerebellum? 9. Describe four cranial nerves, giving functions of each. 10. Name the organs of special sense, naming function of each.

SURGERY.—Describe the administration of chloroform as an anesthetic and mention some of the conditions wherein its use is indicated. 2. Define atrophy and give its causes. 3. Describe the treatment of a deep incised wound across the anterior surface of the wrist. 4. What is the most common seat of rupture of the quadriceps extensor femoris? Give the symptoms and treatment. 5. What are the causes of secondary hemorrhages? 6. Where is the swelling and fluctuation most prominent in synovitis of the ankle joint? 7. Describe in detail the treatment of a scalp wound when there is fracture of the skull. 8. What is meant by gastroenterostomy, and what are the indications for this operation? 9. Give the symptoms and the treatment of dislocation of the lower jaw. 10. What is

(a) productive inflammation? (b) Suppurative inflammation?

ANATOMY.—1. Name the bones of the cranium and describe the mastoid portion of the temporal. 2. Describe the heart. 3. At what situation can the subclavian artery be compressed from the surface? Give anatomic relations that make this possible. 4. What part of the body do the axillary glands receive lymphatic vessels from? 5. What structures are severed in amputation of the arm at the middle third? 6. What viscera are in the left hypochondriac region? What in the right iliac region? 7. Give the relation of the ureters to the pelvic organs in the female. 8. Differentiate between a direct and indirect inguinal hernia, and give coverings of each. 9. Give origin and course, and name terminal branches of great sciatic nerve. 10. Describe the male urethra.

THEORY AND PRACTICE OF MEDICINE.—1. How would you treat hemorrhage in typhoid fever? 2. Describe a case of remittent malarial fever and give treatment. 3. Give diagnosis and treatment of *uncinaria duodenalis*. 4. Give treatment in gastroenteritis in a child two years old. 5. Diagnose a case of lobar pneumonia by physical signs. 6. Can you have a heart lesion for any length of time without renal complications? 7. Give diagnosis and treatment of chlorosis. 8. Give method of using tuberculin for diagnostic purposes. 9. Describe some approved method for removal of impacted cerumen. 10. Give treatment of acute catarrhal conjunctivitis.

OBSTETRICS.—1. Classify hemorrhages and their causes before and after delivery of the puerperium. 2. At what time should a healthy child be weaned? Give methods and length of time you would treat an apparently dead babe at the time of delivery. 4. Give the diagnosis and treatment of death of the fetus during the later months of pregnancy. 5. Give the differential diagnosis of ascites, ovarian cyst and pregnancy before the fifth month. 6. At what time would you repair a lacerated perineum? Name the muscle torn. 7. Give your management of a twin labor with footling presentation. 8. What is the meaning of dry birth? Give management of osuteri in labor. 9. What is the treatment of umbilical hernia in an infant? 10. Give the indications for podalic version.

MATERIA MEDICA AND THERAPEUTICS.—1. Define materia medica and therapeutics. 2. Name two remedies belonging to each of the

following classes: Diuretics, diaphoretics, emmenagoges, and anthelmintics. 3. What do you regard as the safest and most efficient antipyretic? 4. What is the physiological effect of acetanilid? What are the symptoms of poisoning from same? 5. Name three of the most important cholagogues and give dose of each. 6. How is salol disposed of in the intestines, and how is it eliminated? Give symptoms of an overdose. 7. What remedy is especially indicated in chorea? Give dose when used in this condition. 8. Give doses of the two chlorides of mercury and state their therapeutic uses. 9. Name the two most powerful antiperiodics. 10. What disease so closely resembles strychnia poisoning? Give differential diagnosis.

Names of successful applicants: Ackley, N. B.; Baucum, James D.; Bridges, George P.; Brooks, J. P. (c.); Cook, Abner H.; Crandall, M. C.; Curtis, J. F.; Dickinson, M. F.; Fowler, H. C. (c.); Gilliam, H. R.; Graves, W. E.; Hillman, C. C.; Kennerly, R. C.; Lamb, W. A.; Livingston, J. J.; Lynch, Thos. J.; Manning, William E.; Mattison, Ellie (c.); Mobbs, B.; Murphy, Garland D.; McDonald, C. R.; Philp, William H.; Parker, A. C.; Rhoads, Harmon T.; Sanders, John F.; Scroggin, J. H.; Stevens, Lawrence; Schimelpfennig, R. D.; Smith, S. L. (c.); Street, H. N.; Stocking, A. M.; Stanley, Zeph; Shackelford, T. T., Jr.; Tanner, J. F.; Whitacre, J. C.; Wallin, L.; Workman, Howard; Young, J. K.; Yarbrough, R. E.

F. T. MURPHY, *Secretary*.

News Items.

NEW HOSPITAL FOR CAMDEN.

A \$25,000.00 building will be erected this fall in Camden for hospital purposes. It will be an up-to-date structure, and will provide for pay and charity patients.

More than \$11,000.00 has been subscribed and donated. The organization is officered as follows: Dr. J. T. Henry, Eagle Mills, Ark., president; J. S. Rinehart, Camden, vice president, and T. J. Gaughan, Camden, secretary and treasurer.

Dr. G. A. Hinton, of Hot Springs, was dropped from the list of registered physicians at that place August 6 by Harry H. Myers, superintendent of the government reservation. The action was taken upon instructions

from the Interior Department. Dr. Hinton will be denied the privilege of prescribing the hot waters until he shall have had his name restored to the list.—Gazette.

Note.—Dr. Hinton is a member of the State Eclectic Board of Examiners.

CORONER'S JURY CHARGES PHYSICIAN WITH CRIMINAL PRACTICE.

Newport, July 19.—Dr. A. Kellett, proprietor of the Kellett Sanitarium and a practicing physician, was arrested Sunday evening by Deputy Sheriff McCustion on a warrant issued by Coroner Henry Grant, charging manslaughter as the result of the inquest verdict over the body of Mrs. Addie Eger, who the jury investigating the case declared came to her death from criminal negligence upon the part of Dr. Kellett, who attended her. The officer also received commitment papers from the coroner, but the defendant secured bondsmen for \$1,000.00 bail.—Arkansas Gazette.

New Members

Dr. T. R. White, Rector.
Dr. J. A. Morrow, Union Town.
Dr. S. C. Rose, Lead Hill.
Dr. Robert Cowger, Danville.
Dr. W. R. Brewer, Ola.

Change of Location.

Dr. Charles E. Thompson, Ben Lomond to Page, Okla.

Dr. T. R. Frank, Rector to Smithville.

Deaths.

Dr. M. M. Erwin, aged 59, a prominent physician, died at Newport, August 2, after a five days' illness from pneumonia.

Dr. J. B. Bolton, of Eureka Springs, whose death occurred several days ago, was one of the best known physicians in the state. He was a member of the Carroll County and the Arkansas Medical Societies.

Dr. R. W. Read, of Texarkana, died August 2. He was one of the oldest physicians in that part of the state, and was the father of A. C. Read, of this city, who was one of our leading druggists for years.

Personals.

Dr. W. F. Baskerville, of Booneville, spent August 5 in the city.

Dr. L. J. Kosminsky, of Texarkana, is in New York doing some postgraduate work.

Dr. D. R. Hardeman and family are spending this month at their summer home on Mt. Nebo.

Dr. H. H. Neihuss, of Wesson, spent a few days in the city during the first week in August.

Dr. S. T. Tapscott, Jr., and wife, of Scar-cy, have just recovered from an attack of typhoid fever.

Dr. I. H. Cuning, of Knobel, spent two weeks in southwest Texas and New Mexico, returning August 7.

Dr. J. M. Keller, of Hot Springs, one of the "Grand Old Men" of the profession, spent a day in the city recently.

Dr. Leonidas Kirby, of Harrison, is one of the incorporators of the Fort Smith, St. Louis and Chicago Railroad.

Dr. C. C. Stephenson is now in Los Angeles, Cal., and his friends will be glad to know that he is much improved in health.

Dr. R. B. Schimmelpfennig has returned to New Orleans to resume his duties, after a month's vacation spent in this city.

Dr. W. S. Stewart, who has been in active practice in this city for several years, has accepted a traveling position with the American Medical Association.

Dr. R. C. Dorr, of Batesville, who has spent the past three months in Europe, sails from Cherbourg, France, August 21, for New York.

Dr. Leonard R. Ellis, of Hot Springs, who is major surgeon in the state militia, is in charge of the medical department of the provisional regiment now encamped at Dardanella.

Dr. Robert Caldwell and the editor of the Journal spent a pleasant day with the Yell County Medical Society at Dardanella, August 10, Dr. Meriwether making his official visit as counselor.

Dr. George S. Brown, of Conway, and Dr. F. T. Murphy, of Brinkley, president and secretary of the State Board of Examiners of the Arkansas Medical Society, were in the city August 12, conferring with Dr. A. J. Widener, secretary of the Eclectic Board, in regard to adopting uniform application blanks for examination and reciprocity under the new law.

County Societies.

PHILLIPS COUNTY—The committee appointed by the Phillips County Medical Society to look after the case of State of Arkansas against J. M. Worthy and others reports as follows:

Some time in the spring of the present year this man Worthy and his partner came to Trenton, Arkansas, with a covered wagon with the following printed in box car type on the sides:

"Watkins Medicine Co.,
J. M. Worthy, Agent,
Trenton, Arkansas."

They rented an office and while one drove around the country peddling, the other stayed at headquarters and drummed every one who came along.

The attention of the proper officials was called to this promiscuous peddling and prescribing in violation of the law, and in fact the local physician at Trenton, Dr. W. B. Bruce, urged them to take the proper steps without effect. Your committee then took up the matter and brought it before the grand jury. Able counsel was retained to assist the prosecuting attorney, and as a result, Worthy was convicted and fined, and has left the county. Your committee wishes further to report that it has come to their knowledge that the "Watkins Medicine Company" has many agents and wagons doing business throughout Arkansas in violation of the medical laws of the state.

Your committee would suggest that a copy of this report be sent to the state secretary for publication in the Journal of the Arkansas Medical Society, that the profession at large may be warned of the fact and can take such steps as are necessary to suppress this illegal practice. These men were prosecuted under sections 5241 and 5242 of the state law regulating the practice of medicine in Arkansas.

Very respectfully submitted,

WM. B. BRUCE, *Chairman.*

GREENE COUNTY.—The Greene County Medical Society met in their rooms at Paragould, Ark., July 7, 1909. Those present were: Drs. Owens, Scott, Dickson & Dickson, Hammett, Cathern, Bradsher, Hopkins, Lamb, Cupp, Graham. Dr. Halder, of Memphis, visiting, was elected honorary member. The meeting was thoroughly enjoyed by all. We have a good program for next meeting, August 4. We

would like to have every physician in Greene county present.

M. C. GRAHAM, *Acting Secretary*.

GREENE COUNTY.—Medical Society continues in a flourishing condition. Both July and August meetings were well attended. Program for September meeting as follows: Papers by Drs. Jones, Lamb, R. E. Bradsher, G. T. Hopkins, R. J. Haley, Olive Wilson, J. E. Hawkins, E. L. Kennedy.

OLIVE WILSON, *Secretary*.

CRAWFORD COUNTY.—The Crawford County Medical Society held its meeting July 23 and elected the following officers for the ensuing year: Giles Lucas, president; Mat S. Dibrell, vice president; O. M. Bourland, treasurer, and J. E. Blakemoore, secretary.

JOHNSON COUNTY.—The Johnson County Medical Society met at Clarksville, July 5, 1909. Members present: L. A. Cook, W. R. Hunt, E. C. Hunt, J. S. Kolb, C. S. Allen, W. F. Smith and L. C. Gray. The committee on resolutions relative to the death of Dr. J. R. Horner, of Spadra, reported and were discharged. Dr. W. F. Smith reported a case of chronic synovitis of the knees. Dr. W. R. Hunt read an excellent paper on Summer Diarrhea of Children, and discussion followed by Drs. Smith, Kolb and Cook. Dr. M. E. Burgess was appointed to write an article on Malaria for the August meeting of the society, and Dr. T. B. Blakely was appointed to report a case in practice.

L. A. COOK, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society met at the court house in Osceola, July 20, 1909. Those present were: Drs. J. F. Sanders, Blytheville; J. D. Harbert, Maric; W. E. Turner, Butler; S. A. Lowry and J. S. McCreight, Luxora; R. C. Prewitt, T. G. Brewer, H. C. Dunavant, C. M. Harwell and O. Howton, of Osceola. Visiting physicians were Dr. Wm. Britt Burns and Dr. Pelty, of Memphis, Tenn. Dr. Burns reported a case of pyonephrosis, and presented the kidney which he had to remove. Dr. Sanders read his paper on "That Troublesome Liver," and Dr. Brewer reported two cases of symmetrical gangrene in the negro. As August will no doubt be a very hot and busy month, the next meeting will be held at Luxora, September 14, 1909.

O. HOWTON, *Secretary*.

JACKSON COUNTY.—The Jackson County Medical Society held its regular meeting July

13, 1909. The following members were in attendance: Drs. J. F. Bell, O. E. Jones, L. E. Willis, H. O. Walker and A. L. Best. A very interesting and instructive paper on Infant Feeding was read by Dr. H. O. Walker. The paper was freely discussed by members present. Application for membership was received from Dr. C. W. Martin, formerly located at Newark, but who recently located at Newport for the practice of his profession. We are glad to see the members of the Jackson County Medical Society manifesting an increased interest in our society proceedings.

A. L. BEST, *Secretary*.

FRANKLIN COUNTY.—The Franklin County Medical Society held a meeting Thursday, July 15. This meeting was deferred from the regular time, which is the first Tuesday in each month, in order that Councilor Young might be with us. We were very much disappointed when we learned that Dr. Young was called home and so could not stop off. This was one of the best meetings we have had in a long time. Besides the president, Dr. Rambo, there were the following members present: Drs. Gibbons, Turner, Williams, Blackburn and Douglass. Dr. O. M. Bourland, of Van Buren, was a welcome visitor. The discussion of Dysentery, led by Dr. Rambo, was the main feature of the program. There was also a paper on The Early Diagnosis of Tuberculosis, by the secretary, and some interesting clinical cases were presented. We meet next month at Charleston.

THOS. DOUGLASS, *Secretary*.

JEFFERSON COUNTY.—The Jefferson County Medical Society met in regular session, August 4, at the office of Drs. Scales & Duckworth. The president and vice president being absent, Dr. Breathwitt acted as chairman. The minutes of the previous meeting were read and approved. The chairmen of the finance and general arrangement committees being absent, no report was made. The board of censors reported on the cases of Drs. O. G. Blackwell and O. W. Clark, who were charged with doing lodge practice. They recommended that Dr. Blackwell be expelled from membership, and asked for further time on Dr. Clark's case. The report was accepted unanimously. Dr. Blackwell was expelled and the board of censors given more time to report on the other case. It was unanimously agreed by the society that any member who consults with a man who has been expelled, and before he is reinstated, be also subject to expulsion. Dr.

Stewart was to report a clinical case, but for want of time it was postponed till next meeting. Members present: Drs. John, Clark, Rowel, Williams, Woodul, Luck, Duckworth, Scales, Thompson, Brunson, Stewart, Jordan, Loving, Breathwitt, Hankinson, Galligher, Jenkins and Lowe. There is great interest being manifested in our society at present, and we hope to do some good work in the future.

W. T. LOWE, *Secretary*.

[At a call meeting of the Jefferson County Medical Society to hear from board of censors relative to Dr. O. W. Clark doing practice for lodges, the charges were withdrawn. The Doctor having resigned as lodge physician.—W. T. L.]

FRANKLIN COUNTY.—The Franklin County Medical Society held its regular meeting at Charleston, August 3. Dr. Blackburn, the first vice president, presided. Drs. Gibbons, Benefield, Hudson and Douglass were present. Drs. Bolinger and Northum were visitors. The visiting members were cordially entertained by the Charleston members: A paper on the Proper Conduct of Pregnancy and Labor was read by Dr. Blackburn. It was very interesting and was thoroughly discussed by the society. An interesting question was brought out by Dr. Blackburn: How many doctors in Arkansas manage the third stage of labor strictly by the Crede method? All present confessed to practicing some traction on the cord or the edge of the placenta. An interesting case was reported by Dr. E. M. Hudson, discussion of which was deferred to the next meeting. Dr. Bolinger's application for membership was referred to the membership committee. Adjourned to meet at Ozark in September.

THOS. DOUGLASS, *Secretary*.

Communications.

El Reno, Okla.

The coming meeting of the Medical Association of the Southwest, which is to be held at San Antonio, Tex., November 9-11, 1909, should be a matter of the greatest interest to every member of the profession in the five states making up this association, for many reasons.

First. It is to be held in the largest state in the Union, and, while it is not the oldest by any means, it is one of the best organized, so far as the profession is concerned, of any one of the states.

Second. The meeting is to be held in one of the oldest historic cities of this country. It is a city of more than 100,000 inhabitants, with beautiful buildings and points of historic interest, principal among which might be mentioned the Alamo.

Third. The splendid meeting of last year, at Kansas City, and the royal entertainment accorded all who attended, are still fresh in the minds of those who were fortunate enough to be there, and it is no idle boast that those who have the planning of this meeting in charge have set their stakes to surpass even the splendid meeting of last year, and those of us who are acquainted with them feel sure they will do it.

Fourth. We have a conditional promise that we are to have with us as our guests of honor at this meeting Dr. Welch, of Baltimore, the honored president of our parent association, the A. M. A., and Dr. W. L. Rodman, of Philadelphia, who will deliver the oration on surgery.

Fifth. The profession of San Antonio are expecting you and making great plans for your comfort and entertainment, and you ought not to disappoint them.

Sixth. Because, after the meeting is over, an opportunity will be given you, by means of an excursion, the itinerary of which is enclosed, to visit at a very nominal expense the beautiful country and city of Old Mexico. You can't afford to miss this.

Last. Don't be selfish and leave your wife at home to look after the business, but lock up the office, take your wife with you, and make up your mind you are both going to have the time of your lives, and you will not be disappointed, for the meeting will furnish a "feast of reason" as well as great social pleasures, and the ladies will be royally entertained every minute of the time.

F. H. CLARK, *Secretary*.

Book Reviews.

International Clinics—A quarterly of illustrated clinical lectures and especially prepared original articles, by leading members of the profession throughout the world. Edited by W. T. Longcope, M. D., Philadelphia. Published by J. B. Lippincott Company, Philadelphia and London. Vol. II., Series 19, 1909.

The second volume of the nineteenth series of the International Clinics has an article by Shoemaker, of Philadelphia, on Immunization Against Typhoid Fever, with a study of preventive inoculations, which he sums up with the following conclusions:

1. Unquestionable evidence exists regarding the immunity offered by inoculation.

2. Two or more inoculations are necessary to make the immunity of some duration.

3. More investigation of the blood in typhoids for the strength and duration of protective substances is necessary.

4. At present the method for determining the strength of a vaccine is liable to considerable error.

It also contains nineteen other clinical lectures and original articles.

Disorders of the Bladder with Technique of Cystoscopy—By Follen Cabot, M. D., I., Professor of Genitourinary Diseases, Postgraduate Medical School, New York. E. B. Treat & Co., New York, publishers. Price, \$2.00.

Dr. Cabot has given us a very concise and thorough method of his clinical diagnosis and treatment.

His technique of cystoscopy is to the point. It will be a useful book to the specialist as well as the general practitioner.

Tuberculosis:—A Preventable and Curable Disease—By S. Adolphus Knopf, M. D., Professor of Phthisiotherapy at the New York Postgraduate Medical School and Hospital; Associate director of the Clinic for Pulmonary Diseases of the Health Department; Attending Physician to the Riverside Sanatorium for Consumptives of the city of New York. Published by Moffat, Yard & Co., New York.

A work that certainly has a place, and it should be in the hands of every patient afflicted with tuberculosis.

The best cure for tuberculosis is the education of the laity.

Human Physiology—An Elementary Text-Book of Anatomy, Physiology and Hygiene—By John W. Ritchie, Professor of Biology, College of William and Mary, Virginia. Published by the World Book Co., Yonkers-on-Hudson, New York. Price, eighty cents.

The subject is ably presented, and is charming in its simplicity. It is the best book for the public schools that has been brought to our notice.

The Ophthalmic Year Book, Vol. VI.—Containing a Digest of the Literature of Ophthalmology with Index of Publications for the year 1909. By Edward Jackson, M. D., of Denver, George E. de Schweinitz, M. D., and Theodore B. Schneiderman, M. D., of Philadelphia. Cloth, pp. 400, price \$3.00. The Herrick Book and Stationery Co., Denver, Col.

The book covers so many phases of the subject and the field is so broad that one cannot in a short review like this discuss the work fully. Among the chapters that will be of most help and read with most interest, are (a) General Therapeutics, in which are discussed Serum Therapy, Vaccine Therapy,

X-Ray, Radium and the different drugs. (b) General Pathology and diseases under which are discussed Serum Reaction, Opsonins, Ophthalmic Reaction, its dangers, etc., together with diseases that most often have eye complications. (c) Diseases of Conjunctiva, action of toxins and bacteria on same, with a lengthy discussion regarding Trachoma. (d) Diseases of the Cornea. (e) Sympathetic Diseases. (f) Glaucoma. (g) The Crystal-line Lens. (h) The Optic Nerve. (i) Diseases of the Lids.

The work is a credit to the authors and will prove very valuable indeed to those who from want of time are compelled to economize their reading, because here we have in a concise form what in the original would be many volumes, sorted out, we might say, by men thoroughly able to give us the best.

PUBLISHER'S NOTICE.

THE MODERN TREATMENT OF HAY FEVER.

Whatever be the accepted views as to the pathology and etiology of hay fever, there is little difference of opinion concerning its importance and the severity of its symptoms. An agent that is capable of controlling the catarrhal inflammation, allaying the violent paroxysms of sneezing and the abundant lacerimation, cutting short the asthmatic attack when it becomes a part of the clinical ensemble, and, finally, sustaining the heart and thus preventing the great depression that usually accompanies or follows the attack—in short, an agent that is capable of meeting the principal indications—must prove invaluable in the treatment of this by no means tractable disease.

In the opinion of many physicians the most serviceable agent is Adrenalin. While not a specific in the strict meaning of the word, Adrenalin meets the condition very effectively and secures for the patient a positive degree of comfort. It controls catarrhal inflammations as perhaps no other astringent can. It allays violent paroxysms of sneezing and profuse lacerimation by blanching the turbinal tissues and soothing the irritation of the nasal mucosa which gives rise to those symptoms. It reduces the severity of the asthmatic seizure, in many instances affording complete and lasting relief.

There are four forms in which Adrenalin is very successfully used in the treatment of hay fever: Solution Adrenalin Chloride, Adrenalin Inhalant, Adrenalin Ointment, and Adrenalin and Chlorotone Ointment. The solution, first mentioned, should be diluted with four to ten times its volume of physiological salt solution and sprayed into the nares and pharynx. The inhalant is used in the same manner, except that it requires no dilution. The ointments are supplied in collapsible tubes with elongated nozzles, which render administration very simple and easy.

It is perhaps pertinent to mention in this connection that Messrs. Parke, Davis & Co. have issued a very useful booklet on the subject of hay fever, containing practical chapters on the disease, indications for treatment, preventive measures, etc. Physicians will do well to write for this pamphlet, addressing the company at its home office in Detroit or any of its numerous branches.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Stms	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leali	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
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Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

DURATION OF THE TREATMENT OF SYPHILIS.*

Eugene Carson Hay, M. D., Hot Springs.

We all agree that syphilis should be vigorously treated, and mercury is our chief remedy to rely upon for its extinction; also there is an approximate unity of opinion among the leading syphilographers as to the duration of this treatment, but with the constant tendency, as experience matures, to lengthen the period, instead of curtailing it. But I am so frequently consulted by patients who have been advised by their former physicians that they could be cured in eighteen months or two years; also patients with tertiary accidents, who have previously been pronounced cured after one year, eighteen months, two years, and occasionally three years' course of treatment. Most invariably this treatment has been entirely internal medication; hence, I consider this an excellent subject for me to present for discussion. The average case of syphilis, especially after the first storm of secondary symptoms has subsided, causes the patient such very little physical discomfort and mental concern that they are very prone to grow careless and indifferent to their treatment when they are free from symptoms, and all is apparently well. It is frequently very difficult even for their physicians to make them realize the importance of treatment. We are all human and not inclined to take medicine when feeling well and in the best of health, and do not prepare ourselves sufficiently for what may occur in the future. The treatment of syphilis during the active state is, of course, very important, but the fundamental thought that the physician should keep constantly before his mind

is best expressed by Fournier where he says "What will become of this case fifteen or twenty years from now?"

It is the benign cases that are the most liable to suffer with disastrous sequelæ, especially those involving the nervous system. Whether it is because they are the ones who receive the most indifferent treatment and negligence during the early stage, or what not, it is a clinical fact for which we can give no scientific reason, that the most serious lesions of the nervous system frequently follow the most benign syphilis. As stated by Fournier, "out of a total of 1,664 cases, including all kinds of tertiary lesions, I have found antecedents as follows:

Benign or very mild secondaries.....	1,424
Secondaries of average severity.....	131
Serious secondaries	45
Early malignant syphilis.....	64

In round figures, out of ten tertiary lesions, there are nine which follow benign secondary syphilis. This bears out my own observation and experience, and as stated before, especially involving the central nervous system, both in the active and the parasyphilitic conditions. I have records of over 600 such cases, and over 85 per cent gave histories of very mild secondaries, some with little or no treatment, and others had treatment of from one to three years. On examination not any of them showed scars of past syphilitic manifestations, or any evidence whatever of luetic infection, so that I arrived at the conclusion that those patients who showed more pronounced cutaneous and mucous involvements during the secondary period, and when suffering with recurrent accidents, manifestations develop on the same surfaces, or involvement of bone in the form of ulcerations, gummas or periosteitis, etc., are less liable to syphilis of the nervous system; hence I believe that these expressions of syphilis serve as an avenue of escape or a medium for the disease to vent its fury upon, and thus:

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

protects and fortifies the spinal cord and brain.

Now, going back to the exact title of my paper, as to the duration of treatment, it is generally considered by most modern writers that three years is the minimum period in which to effect a cure. Some few still think two years is sufficient. Fournier says that when he first recommended two years' systematic and methodical treatment his confreres attacked him furiously, and said he was killing his patients with mercury. He now believes in three years' treatment with additional courses during the fourth and fifth years. Jonathan Hutchinson, several years ago, came out with what he called his "abortive treatment," claiming a cure in six months' duration, but this treatment I do not believe was ever taken seriously by many members of the profession. From my experience, I believe every case, benign, moderate or severe, in its early infection, should be treated three years methodically and systematically, with a period of rest allowed between each course of treatment for a month to six weeks; or, in some cases, two months. These conditions to be influenced by symptoms and indications in each individual case. After three years' course has been completed, providing no symptoms have manifested themselves during the last eighteen months of the course, the patient should then be given a rest and two additional courses of six weeks each should be administered during the fourth year, one in the fall and one in the spring; during the fifth year, two similar courses of one month to six weeks each as given in the previous year. Then one course of one month each to be given, once a year, for five years, thus taking our patient up to and well within the stage when parasyphilitic conditions are most liable to develop. On first reflection this system that I have advised may seem excessive, or treatment carried far beyond rational limits, but if the treatment is carried out properly and carefully you will not depress the physical condition of your patient, but instead he will thrive and show no evidence of debility from such measures; whereas, if you discontinue treatment too early he is exposed to the dangers of serious tertiarism. The argument may be presented that we strike a happy medium between these two extremes, and that such a protracted treatment is not necessary. I admit that such vigorous treatment is not necessary in all cases. I believe some cases are cured permanently with one or two years' treatment, possibly some in six months; I will

go further, and say that I firmly believe it is possible for one to contract syphilis and go through life without treatment, and live to a ripe old age, and die from other causes, ignorant of their infection, as undoubtedly some cases spontaneously recover. As stated by Metchnikoff in *System of Syphilis*, Vol. 1: "Syphilis is a malady which can undergo spontaneous cure, and which is nearly always amenable to proper treatment; it ought to be very interesting to find out a way by which a cure is effected. For this research monkeys should provide a good field, as in them syphilis is cured spontaneously, in all but a few rare cases."

The following two cases illustrate what a small amount of treatment will accomplish in some. A man consulted me who thirty-five years previously contracted syphilis. He visited Hot Springs and rubbed mercury for four weeks. He returned every year for five years, remaining four weeks at each visit, and took a course of inunctions. No specific treatment was taken during the intervals between the pilgrimages to the Springs. In other words, he took five months' treatment in five years. He then married, raised a healthy family, and no evidence of syphilis ever manifested itself upon his wife or children. Three weeks before consulting me he commenced having severe headaches, which terminated two days before his arrival at my office in an attack of vomiting and partial unconsciousness, resulting in ocular-motor paralysis to the left eye, with diplopia and photopsia. He rapidly recovered under inunctions of mercury and iodid of potassium.

Case No. 2. An old gentleman consulted me who had two weeks previously developed gummatous ulcer on the left buttock. It was about two inches in diameter with worm-eaten base, and rapidly extending when I first saw him. He gave a history of syphilis forty years previously, with six months' internal treatment. He had enjoyed good health all during this long interval, so far as syphilitic symptoms were concerned, and seemed surprised when I told him of its syphilitic nature. I dressed it locally about one week and it rapidly extended. I did this to convince him that the diagnosis was correct. He was then placed on inunctions of mercury and with no change of local treatment it rapidly healed in three weeks.

Now, on the other hand, I have had a number of patients suffering with the gravest of nervous lesions, especially the parasyphilitic variety, who have had the stereotyped three

years' course of internal medication. Hence, it is for the benefit of these poor unfortunates that I recommend this long course of treatment. It is far better that we treat all our patients several years too long than quit one day too soon, providing he shows no injurious effect from the treatment. When carrying a man through a course of treatment we must not only think of the possibility of his marriage and procreation of children, for I see many such cases of syphilitics who have perfectly healthy families, but they, themselves, are suffering with some tertiary lesion, that has rendered them useless as bread-winners and in a number of instances work great hardship, deprivation and suffering on an innocent family, for which they are responsible, and should be in a physical condition to protect and care for. One of the causes for grave mistakes that are frequently made, not only by patients, but occasionally by physicians, is that syphilis as a rule causes such little physical discomfort and is so benign and insidious in its action during the early stages that it surrounds both physician and patient with a false cloak of security, and the physician will frequently allow the patient to grow careless and indifferent in following out the routine of treatment. I do not know anything more dangerous than a patient to have his physician as an intimate social friend and comrade; for such relations and social intercourse frequently interfere with the carrying out of medical decrees, as pleasure and treatment frequently do not harmonize. In an excellent article which appeared in the American Journal of Dermatology in December, 1907, entitled "The Eradicative Treatment of Syphilis," by Jean Darnell of Aix-les-Bains, he advises even a more vigorous course than I have outlined in this paper, and he concludes his article with this following excellent paragraph:

"To sum up, the thorough and complete treatment of syphilis comprises methodical, intensive and prolonged administration of mercury, assisted with strict hygienic precaution from the fifth to the twelfth year; complementary courses of treatment repeated every six or twelve months are necessary, and this treatment is not only curative but preventive. A properly treated patient usually escapes with slight secondary manifestations and his liability to later tertiary and parasyphilitic affectations is notably diminished. In ninety-five patients thus treated the tertiary period remained mute and inoffensive. The offspring of these patients is practically immune in respect to heredosyphilis, and women cease to

be liable to repeated abortion. In short, syphilis is a disagreeable accident, but the damage can be made good, and patients who will devote time and patience to the treatment for its eradication enjoy a very great measure of safety against its most terrible sequelæ."

DISCUSSION.

Dr. Steer—Regarding the point insisted upon by Dr. Hay with reference to the length of treatment, I firmly believe that, with our present knowledge and experience with syphilis, by a continued but interrupted treatment, we shall avoid to a large extent the so-called parasyphilitic conditions. I use the word "interrupted" advisedly, because in the treatment of syphilis the too great forcing of iodid and mercury, to my mind, is apt to cause as deleterious results as the syphilitic virus itself; that in the handling of cases of syphilis it is necessary to maintain the best possible condition of nutrition. Without this I think that nothing can be accomplished. We see so many cases at Hot Springs afflicted with these late nervous manifestations, and with such cases we observe the improvement under antisyphilitic treatment. Particularly is this true of locomotor ataxia, with regard to the motor symptoms. The sensory symptoms, as lancinating pains, persist to an extent, but the motor symptoms are invariably relieved, to a degree, if they have not gone too far, by proper treatment—relieved to an extent (I do not mean cured entirely, as destroyed tissue cannot be restored). Now, if it is possible to relieve these conditions by treatment it would seem to be only logical that by a longer duration of treatment, up to the point when the so-called parasyphilitic conditions develop, that we could prevent them, giving due consideration to the proper treatment, but not pushing your drugs to the extent of poisoning. Until the Wasserman reaction reaches a stage in which we can assure our patient that he is safe from these later syphilitic manifestations, particularly those of the nervous system, we should continue the treatment intermittently up to the time when the parasyphilitic conditions usually develop.

Dr. Martin—Dr. Hay has given us a very excellent paper on the treatment of syphilis, and I am heartily in accord with him on almost every point. But there is one position which he has taken which I consider extreme, and I cannot let it pass without a little opposition. I cannot see, either from my own experience or from the teachings of others, any necessity for treating our patients more than

three years as a rule, provided they have been *properly* treated during the three years. The statistics published in the "Oxford System of Syphilis" show that but a very small percentage of tertiaries occur after a patient has been treated even two years. The greatest trouble, especially with the general practitioner, is that he cannot control his patient; he may keep patients under treatment long enough, but he has great difficulty in making them take medicine continuously while under said treatment. The patient and the doctor are both much to blame for this, the patient for getting careless and the doctor for prescribing an internal treatment as a routine. The physician gives a prescription, probably for the "mixed treatment," and forgets it; the patient has the bottle refilled a few times and then he forgets it and the treatment is abandoned until another crop of syphilides shows up, then they start the treatment over again and probably the patient gets it consistently for three months out of the next year. Where such erratic treatment is given Dr. Hay is right and it would be well to continue it for ten years; but if the patient receives mercury by intramuscular injections he has to keep in touch with the physician and has the benefit of his constant advice and control. If these injections are continued for five weeks out of every two months over a period of thirty-six months I do not believe that there will be any necessity for further treatment or any danger of later tertiaries. I believe that Dr. Hay's being extreme on that point is due to the fact of his seeing so many cases of syphilis of the nervous system. It is very natural for the things we see constantly to warp our judgment. The eye and ear specialist can find a cause for almost anything in eye strain; the rectal specialist thinks he can cure many things by dilating the sphincters; the gynecologist finds a cause for the same things which the eye man blames to eye strain in some pelvic reflex. Dr. Hay is something of a specialist on syphilis of the nervous system. He sees more of these cases than most people and knows how disastrous such conditions are. Consequently one cannot blame him for advising a ten-year treatment to avoid such an occurrence. Some of his patients may claim to have had three years' treatment, but the question is what kind of treatment? The sooner we begin to recognize the fact that we cannot know what becomes of the salts of mercury when taken into the stomach, and the sooner we abandon the routine treatment of syphilis by the internal administration of drugs and resort to the exact meth-

od of intramuscular injections the sooner will such cases as I have referred to become scarce even in Hot Springs. Also, then Dr. Hay will not have so many cases of tertiary syphilis and may agree to cut that ten years down 60 per cent.

Dr. Lenow—I regret that I did not hear the previous paper in full, but I did hear Dr. Hay's paper and I think it a most excellent one. His theory and advice in general are to be commended. But unfortunately we have idiosyncrasies. There are certain individuals who have syphilis who are not readily cured. You may treat them theoretically as well as practically, and with the different preparations of mercury, and yet they do not do well. I think the successful physician in many of these cases is the one who uses some judgment in the administration of this remedy; I can not believe that it is proper and right to keep your patient constantly full of mercury at all time, but there should be periods of respite from this drug. He should be kept under surveillance, you should see him every few days, be in touch with him, that you may study his symptoms and condition. Again there are cases of this disease that do not take mercury well on account of their peculiar idiosyncrasy. For such cases we have to rely on some substitute. I do not agree with Dr. Hay that it is necessary to continue treatment in these cases for eight to ten years. Syphilographers of thirty years ago put the period of treatment at from three to six years, but our more modern text books tell us that where the remedy is properly administered good results will follow in three years. I do not believe it is necessary except in very extreme cases to continue the treatment as long as Dr. Hay suggests. I wish to commend the paper. He has not failed to impress upon you the importance of keeping the remedy up. You ought, however, to exercise sound judgment and much discretion in administering this remedy.

Dr. Thompson—In the first place, the doctor said it was the patient's fault, when really it is the doctor's fault, for the doctor's burden is too great for the patient to bear, for he gives the patient three or four doses of mercury a day, and some doctors insist on giving it every two hours, until it becomes intolerable to the patient, and he has to fly to advertised medicine, and years afterwards comes with locomotor ataxia. One point that I want to insist upon is that iodid of potassium will not absorb gummata, and that gummata always terminates in ulceration unless it has been thoroughly opened and treated surgically.

When you have gummata of the brain the patient always "passes over the river." Recently I have seen several cases of gummata that were treated by specialists for months and took large quantities of iodid of potash with no benefit, but yielded at once after thorough incision, wiping with iodoform gauze and washing with bichlorid solution at once changed the character of the inflammation favorably.

Dr. Wood—I would like to make this point. We now know the cause of syphilis sufficiently well. We know that mercury is the great antidote of the *spirochaeta pallida*. I would like to ask this question: What benefit do we get from the iodid, except to relieve the effect of the mercury? Then we do get benefit from the iodid. If you have brain paresis there is nothing better than iodid. You may say then if you want to eliminate the germ that does the damage nothing is better than mercury. As you suggest, the inhalation is the best means of introducing mercury into the system, and it is done with less disturbance to the stomach than in any other way, and that is the point we wish to make. Let us mercuro-ize our patients in the best way possible and use potassium iodid to relieve the patient of the effect of syphilitic poisoning.

Dr. Walt—I think that one of the most important things to be considered in handling mercury is the environment of the patient. We find patients who suffer much more than the others from the same lesion. As an instance we may note the matter of idiosyncrasies, which I think are simply based on definite pathological conditions. Mercury and iodid of potassium are simply eliminants. We would not expect a man to go through syphilis without having a disturbed condition, because the nerve power is disturbed all the time, and his reparatory force cannot be maintained to normal while the syphilitic infection remains. Then it is the same way with mercury. They ought to be able to appreciate the effect of an abnormal condition and the physiological effect of a drug. I think we should watch the effect not only of our syphilis, but of our mercury and anything else that is connected with the condition. The patient, in my opinion, is the most important point of consideration in the treatment of syphilis.

Dr. Hay—Regarding Dr. Steer's remarks concerning tabes, will say there are two classes of tabetics; one that improves under mercurial treatment, and the other that remains stationary; in fact, in some cases the treatment seems to promote degeneration. The

ones that improve is what I consider a mixed condition. They have a syphilis of the cord and also a true tabes. It is not unusual that these unfortunates have a diffused syphilitic meningitis of the cord and will improve up to a certain point and then stop and remain stationary. In these cases I consider that we have removed by treatment the active syphilis and have now gotten up to the degenerative bar, and further improvement ceases. There are others that I am positive have had their degenerative progress aborted by specific treatment being instituted early. I know of cases that have remained stationary for ten to fifteen years and are still in the same condition. They have all the early classical symptoms of tabes and have remained in the same condition ever since they have been under my observation. These cases generally suffer severely from the pains and are classed by some neurologists as neuralgic tabes. I do not believe any man can positively tell incipient tabes from a syphilis of the spine, and frequently the therapeutic test has to be used to arrive at a diagnosis. Syphilis is a great masquerader. Sache, referring to this point, says that he has in his possession the spinal cord of a man whom he presented to his class as a case of typical locomotor ataxia; at the autopsy he found instead of a tabes a widespread syphilitic infiltration up and down the cord, with special invasion of the posterior columns. In my own experience, I have seen a few cases with all the cardinal symptoms of early tabes clear up entirely under inunctions of mercury or injections. Regarding Dr. Martin's remarks about duration of treatment, he quotes Fournier's statistics of 2,000 cases; if I remember correctly from this table, he gives six recurrences of a total of some 1,700 that had recurrences after a three years' course of treatment. Now, if you will remember, I did not contend in my paper that all require this lengthy treatment which I have advocated. There is no doubt but that some spontaneously recover, and some recover with very indifferent treatment, while others have syphilis stamped on them indelibly for life, and as we cannot positively isolate these cases I think it best to treat them all to be on the safe side. But since the discovery of the Wasserman reaction, which I consider is of great assistance, we can use it largely as a guide in the management of such cases. It is for the salvation of these unfortunates that have involvements of the central nervous system that I recommend this universal method for all. So long as we do not over-mercuro-ize or injure our

patient's general health, we have done no harm, and possibly saved some poor wretch from tabes or paresis. In the management of all cases of syphilis a physician must use good sense, and no two can be treated identically alike. Strict attention should be paid to the gums, nutrition, stomach and bowels, kidneys and weight. Some cases never show any evidences of mercury upon the gums, and the first symptoms we have of mercurialization is a pronounced depression of the nervous system, loss of weight, appetite, and general malaise and depression. If albumen appears in the urine while under treatment it should be discontinued for a while, but the presence of albumen in the urine is not always evidence that treatment should be desisted from, as it occasionally comes from the syphilis or from some other source, and I have frequently seen it clear up under treatment. Regarding Dr. Lenow's remarks about over-treatment, I stated that the doctor should direct the medication with great care, familiarize himself with any peculiar physical idiosyncrasy of his patient, and see that his instructions are carried out. The patient should thrive under mercury, and when he commences to go down under treatment it is generally time to let up on the specific medication for a while. As I stated before, some cases progress favorably with pronounced kidney lesions, but when mercury irritates the kidneys, it should be discontinued. Dr. Thompson, speaking of a gumma, says that iodid of potassium will not absorb it. On this point I take pronounced issue with him. Iodid of potassium, as a rule, will absorb a gumma much more rapidly than mercury, but if mercury is not given in conjunction with your iodid or administered immediately after it, the gumma will have a great tendency to return. The average gumma will disappear very rapidly under the iodid, providing it has not advanced to the new growth stage when it has become a hard, fibrous mass, and the iodid will then have no effect on it. If they develop on the tibia they either break down and suppurate or may go on and form exostosis, and remain for life. I recently had a patient who had a large gumma on the forehead that failed to respond to inunctions of mercury and large doses of iodid of potassium that rapidly yielded to injections of salicylate of mercury. In replying to Dr. Wood's remarks about iodid of potassium: Several years ago I read an article before the Tri-State Medical Society at Memphis, in which I emphasized the point that iodid of potassium had no effect in the cure of syphilis, it acting only as a solvent;

or, in other words, dissolve or promote absorption of any syphilitic deposit. It is especially valuable in this respect during the tertiary stage. It also acts beautifully in the secondary stage upon the throat lesions, syphilitic headaches and rheumatic pains. Since the discovery of the *spirochæta pallida* and the Wasserman reaction it has proved the part played in the treatment of syphilis by the iodides. It has no effect on the Wasserman reaction or the disappearance of the *spirochæta* from the syphilitic lesions. In addition to the specific treatment in all syphilitics, as I stated before, the hygienic surroundings, nutritious foods, habits, plenty of fresh air and exercise are of equal importance.

PRESENT STATUS OF THE SPIROCHEATE PALLIDA.*

T. E. Sanders, M. D., Hot Springs.

The etiology of syphilis has for the past generation been an interrogation. That it must be due to a specific organism has been conceded by the best authorities for centuries, yet they were unable to identify the germ. Many pathologists have strained their eyes searching in vain. The cause of the disease seemed to be lost as well as the origin or the first account of the disease. Syphilis is such an old disease that the etymology of the word (syphilis) is unknown, being lost in antiquity. There are several theories concerning the origin of the word. Some consider it to be derived from the Greek words meaning "a hog" and "I love," others from the words meaning "with" and "I love," and others from the words meaning "a reproach." Everything has a sweet and bitter side. If it is derived from love it must be the bitter side.

It was not until 1905 when Schaudinn published an account of his researches that the true microorganism became known. He was appointed by the Imperial Board of Health of Berlin to investigate the work of Siegel, who had discovered an organism in syphilitic blood which he called the "cylorrhæcetes lues." Schaudinn appointed Hoffman to assist him. Together they identified an organism entirely different from the "cylorrhæcetes lues" of Siegel and called it the *spirochæta pallida*. Their report showed that the *spirochæta pallida* was present in over 300 cases

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

of syphilis and was absent in nonsyphilitic cases. Later their work has been corroborated by pathologists all over the world.

Nomenclature—The words *spirochæte pallida* are of Greek origin, meaning a coil and a hair, and *pallida*, meaning a pale. The words therefore mean a pale, hair-like coil, which is very descriptive. The organism may be described as a spiral corkscrew body having pointed ends which are unique. There are from three to six coils, although as high as twenty to twenty-five have been noted in each and giving it the shape of a saw. The length is variable from four to fourteen MM, about twice as long as a red cell. It is often associated with the *spirochæte refringens*, which is differentiated by being thicker and having less curves. Some authorities think that the *spirochæte refringens* is probably one stage of life cycle of the *spirochæte pallida*. That is still open to question. The *spirochæte refringens* stains very readily while the *spirochæte pallida* stains with great difficulty, showing thereby quite a difference in chemical composition.

The *spirochæte pallida* when examined in a fresh specimen has three motions, namely, a corkscrew rotation on its own axis, a gliding back and forth and a bending upon its axis. One to two flagellæ have been observed. The other *spirochæte*, namely, the *spirochæte dentium* or *buccalis*, and the *spirochæte balamtiectis*, are shorter, thicker, have longer curves and stain more deeply. They are therefore readily differentiated.

Methods and Examinations—There are several stains employed to stain the *spirochæte pallida*, namely, Goldhorn's, Geimsa's and Hastings'. Goldhorn's method requires less time (one-half to two seconds only) while the Geimsa and Hastings method requires fifteen minutes. With Goldhorn's staining method the *spirochæte pallida* appears a faint purple, while Geimsa and Hastings stains color them a faint red. In France the favorite stain is marine blue.

Method of Staining—First, obtain specimen from a syphilitic lesion as a gumma, mucous patch or chancre by light curetting or rubbing briskly with a cotton swab. Bleeding takes place. The blood should be wiped away. Then the serum exudes. A drop of serum is spread upon a clean slide and stained with one of the above-mentioned stains. A slide can also be made from the enlarged glands by aspirating a few drops of the juice. The slide in each case should be dried without

heating. A positive finding is absolute proof of the disease while a negative finding is not. If one is suspicious of the disease he should make repeated examinations before pronouncing it a nonsyphilitic, just as he does in pulmonary tuberculosis. In looking for the *spirochæte pallida* he should always take into consideration how long the patient has been taking the mercurial treatment. Thorough familiarity with the germ is essential or else they may be easily overlooked. For the staining of tissues Levaditi's method is most commonly used, which consists of hardening process and impregnation with a weak silver nitrate solution and then staining with Geimsa stain. With this method the kidney, spleen, liver and other organs have been shown to be thoroughly saturated with the *spirochæte pallida* in case of still birth due to syphilis. One of the most satisfactory methods, and a very quick method, too, of examining the *spirochæte pallida*, is with the use of the dark field condenser. By this method only a few beams of light are allowed to pass obliquely through the specimen. The *spirochætes* illumine up as silver spirals and in fresh specimens their motions can be easily studied; *spirochæte* that resist staining will appear very discernible. It is on the same principle as seeing the dust particles in the air of a dark room where a few rays of light are allowed to enter; it is examination by reflection.

Reasons why the *spirochæte pallida* is the cause of syphilis:

First. First and foremost, because it is found in all forms (acquired and inherited) and all stages (primary, secondary and tertiary) of syphilis.

Second. Because the therapeutic agents (mercury and iodide of potassium) that benefit the disease diminish and destroy the *spirochæte*.

Third. Although the organism has not been cultivated in culture, yet it has been found in inoculated monkeys.

Fourth. Its absence in nonsyphilitic diseases.

Fifth. The presence of more *spirochætes* in the most infectious lesions.

Sixth. The presence of the *spirochæte* in the placenta of syphilitic mothers.

Early Diagnosis of Syphilis and Treatment—With the discovery of the *spirochæte* and the later methods for its identification has come the possibility of diagnosing positively the hard Hunterian chancre and the institution of early treatment before the whole

system has become saturated with the germ. It stands to reason that as soon as the chancre is diagnosed that we should not wait for the secondary symptoms. Such delay is harmful, as the secondary symptoms are merely an expression of the multiplication of the germs and their transportation to other parts of the body. With the perfection now of the Wasserman serum, the tripod upon which the hopeful future of syphilis shall rest will have been completed, viz: First, the identification of the disease early; second, the early use of energetic treatment, and, third, the use of the serum to tell when the disease is subdued.

The world seems to overlook the masterpieces of work among the physicians and surgeons. If there is one name that deserves to be written on the pages of fame it is the name Schaudinn. His achievements should make his name immortal.

DISCUSSION.

Dr. Bledsoe—The doctor has left very little in his paper for me to say. The early diagnosis of syphilis is a comparatively new thing; that is, the staining methods have only recently been perfected or made so easy that they are within the scope of almost every physician who has any knowledge of the use of the microscope. One thing that impresses itself particularly upon me, which the doctor mentioned, is the value of a diagnosis made in a very few minutes or a few hours. The time was when the custom was to wait until the secondary manifestations showed themselves before we were sure of our diagnosis. But, with the aid of perfected technic, due to the discoveries of Schaudinn, Hoffman and many other pathologists, we are able to make a diagnosis and to put our patients immediately upon treatment. The value of this appeals very strongly to me, because I believe that if this is done we take the organism and kill it out before it has time to become systemic. The secondary eruption, or the so-called secondary eruptions in syphilis, are a sign of systemic infection. If we can destroy the toxins formed by the organisms before they become systemic, then certainly we have lifted a large load from the body, and I believe that time will show that in cases of syphilis which are treated early, before secondary manifestations show themselves, there will not be those late nervous manifestations which we so frequently see. This, in my mind, is as important as any other thing

connected with the early diagnosis of syphilis.

Dr. Hoffman—I can only emphasize what Dr. Bledsoe has said, that it has only been recently since the laboratory methods have become so modified as to make themselves applicable to the general practitioner. It seems to me, now that the practical test has been perfected, and more practitioners will avail themselves of it, that I can only emphasize the importance of what Dr. Bledsoe stated, not only about the early diagnosis, but about the beginning of the treatment early. In syphilis, we have to deal, in the first place, with a localized infection, which will become systemic, and if we can forestall this systemic infection, we have done a great deal.

One point not brought out, although it may come out later, is, I notice in the European journals that they are in the habit of using atoxyl immediately after a diagnosis has been made, and during the period of the chancre, between that and the secondary period. They report very good results from that. I am very anxious to see if any one has had any experience with this preparation of atoxyl.

Dr. Chesnutt—I wish to thank Dr. Sanders for the able manner in which he has presented his paper on spirochæte pallida, and also wish to make a few remarks regarding the technic of staining; that is, to set forth how easily it is done, and also to speak of two cases that recently came to my knowledge, where it was possible to make a diagnosis before there were any secondary symptoms to appear.

In the first place, as Dr. Sanders stated in making the smears, the technic is not an elaborate one at all. All that is necessary is to wash the chancre thoroughly with green soap and water, and when all the soap is removed, merely to take a sponge and rub it firmly until a small quantity of blood and serum exudes, and from that make your smears or cover slides. You merely allow them to dry in the air. You can use either the Geimsa stain or Hastings' modification of the Hocht-Jenny stain, which does the fixing and staining at the same time. This method only takes from five to ten minutes, and the only care you have to use is to be certain that the stain which you use does not have any excess of alkali. That is the whole point in the staining. If there is an excess of alkali, there is always a considerable precipitate of methylene blue that is in the stain. For that reason it is impossible to distinguish the spirochæte at all. On the other hand, a very slight acidity brings the spirochæte out.

The second point I want to make with reference to the early diagnosis is this: Very recently a man came to my office who gave a typical history of having acquired syphilis about five or six weeks previously. He came to me on the fifth day. The chancre was a typical one. I hardly believe that any physician would have waited for the secondary symptoms to appear. But at the same time it gave me some degree of pleasure to be able to confirm the diagnosis, and to be certain no mistake was being made; so smears were made, and the spirochæte were demonstrated, and the man was immediately put upon luetic treatment, and although he could not remain in the city—it would be four weeks up to that time, or that would be four weeks and five days—there had been no appearance of any secondary symptoms. I haven't heard from him since then.

The second case I want to mention which is of interest is this: There was a man who came to Hot Springs for treatment of chronic rheumatism. Three weeks after he had been there, and six weeks after having the last intercourse, chancres appeared. The physician whose patient he was had had two or three stains made for the spirochæte, and was waiting for the secondary symptoms to appear. Finally, not being able to demonstrate them, he sent them down to me to see if I could find them. The physician who made the stains had merely drawn the slide over the surface of the chancre, and for that reason he did not find the spirochæte, but they were there. As many as nine would be found in one field.

Both of those patients were put upon anti-luetic treatment, and it is a question whether the secondary symptoms will ever appear or not. Sometimes it is not possible to stop the progress of the disease, but certainly the time to start is early.

Dr. Martin—I have been very much impressed with the scope of this discussion. I do not think I ever heard it advocated before, in any medical body, that syphilis could be aborted, or that the time of treatment would be limited in years by beginning the treatment early. I don't know that that is the case yet, but it seems to be the opinion of every one who has spoken, and I hope they are right about it.

As to the use of atoxyl in the early treatment, as suggested by Dr. Hoffman, I have only had an opportunity to see two primary lesions since I began using the arsenic preparations, and one of them was a very typical

lesion, so typical that without any microscopical verification of the diagnosis, I gave him ten grains of salophen at the first injection when I first saw him. The induration in this case was so great as to take in almost the entire glans penis. It sounds very remarkable, but the next day there was no induration. He got five injections in ten days, and when he left at the end of ten days his chancre was entirely well. I never saw a chancre get well that quickly before. The injections were only seven and one-half grains after this first one. The second one was not typical; it was not verified by the microscope. The negative findings, after three examinations, gave me solace. In repeating it a half dozen times, and getting no results whatever, I concluded I must not have had a case of syphilis in that instance.

In the later treatment of syphilis, I think you will find these preparations very efficient. In thirty-two cases that I have used them I have had beneficent results in twenty-eight cases, and all of the secondary cases have been benefited more than the others.

Dr. Hay—I wish to emphasize the fact in regard to the early treatment of syphilis. I am surprised at the remarks about the modification of systemic infection, if you commence treatment as soon as the chancre develops. The same time that the chancre appears, the same time you have systemic infection. That has been demonstrated, as Fournier spoke about a man having had the abrasion cauterized half an hour after exposure, and still syphilis developed. I firmly believe, as Fournier himself states, that if you institute the treatment, particularly in the primary stage of syphilis, you greatly impede the future progress of that disease. You are less liable to tertiary lesion. But the point I wish to emphasize is that when the chancre develops, the man's whole system is syphilitic. You will find the spirochæte, not only in the lymphatic glands, but you will find them around the deeper blood vessels. They particularly have a predisposition for the blood vessels. Now, to show you that a man will have syphilis, I mean after cauterization after exposure. I had a case of a young man who washed his penis with pure carbolic acid immediately after exposure by accident. Of course, he had a terrible inflammation to ensue immediately. Three weeks from that date he developed a chancre from that exposure. I am the greatest believer in beginning treatment as soon as you can make a diagnosis, before

the secondaries have developed. I firmly believe that the moment you see the chancre that man is syphilitic all over. Of course, probably these spirochæte will go through some transitional stage and not be as virulent, that by your treatment you modify them so that they do not make such a terrific impression upon the system; but a man in the primary stage should be equally as alert as if he had waited for the secondaries. The main point you have accomplished is that he is less liable to serious lesions in the tertiary stage than when you wait for the secondaries to appear.

Dr. Sanders—I have nothing to say only about the diagnosis. If a man comes to you with a sore upon his penis there is only about three things that it can be; either herpes, chancroid or syphilis, or gumma. Of course, that would be syphilis. First, I would look to the presence of the bacillus or chancre germ. If I did not find that, then I would look to the spirochæte. The trouble is they don't get the serum right. They don't make the smears right. They don't go deep enough. Go pretty deep, and let them know the next day that you have been working on them.

As far as the early diagnosis is concerned, I have had two or three cases lately, within the last three or four months. In one, I never had the secondary symptoms to appear, but I have been pushing the treatment right along. I have one case, now two months old, where I made a dorsal incision, and found a hard chancre. I pushed the treatment on him, and he has not had the other symptoms at all. I watched his blood every day for three weeks, while on mercury treatment, and you could see gradually the diminution or disappearance of the spirochæte every day. After three weeks I could not find any spirochæte at all.

THE LABORATORY DIAGNOSIS OF SYPHILIS.*

By E. P. Bledsoe, M. D., Little Rock.

Time was when the diagnosis of syphilis was clinical in the purest sense of the word. Doctors spoke learnedly (and still do, for that matter) of the indurated base and the punched out appearance of the hard chancre and then nine times out of ten advised their pa-

tients to wait for secondary manifestations in order to be sure of their diagnosis. Fortunately for both the patient and the physician this time has passed. When Schaudinn and Hoffman in their memorable paper of May 17, 1905, announced the discovery of the spirochæte pallida, they inaugurated a new era in both the diagnosis and treatment of syphilis. With the aid of the microscope and a simple laboratory technic, the physician is now able to make a positive diagnosis from the initial lesion and to put his patient immediately on treatment, thereby avoiding any secondary manifestations, and, what is even more important to my mind, the dangers of late nervous lesions. Before entering into a description of the organism and the technic of its demonstration, let me quote an extract from a paper read before the Chicago Medical Society by Dr. B. C. Corbus. He says: "During the past eight months I have examined one hundred and fifty cases, including chancres, condolomata, papules, mucous patches and inguinal glands. In no single instance when the organism was demonstrated has the subsequent course of the case shown the diagnosis to be wrong. So confident am I in regard to its specificity that I have formulated the following conclusions.

"First. The spirochæte pallida is the true cause of syphilis and its presence is equivalent to a diagnosis of syphilis, though its absence does not rule out syphilis.

"Second. By means of this method, the spirochæte may be demonstrated in *all* primary and secondary lesions of syphilis if the search is persistent.

"Third. The greatest value of Schaudinn's discovery is that it enables us to make a positive diagnosis from the primary lesion.

"Fourth. All primary lesions show the spirochæte pallida.

"Fifth. The diagnosis should be made from the primary lesion—after the organism has been demonstrated in the primary lesion only harm can be done by waiting for other manifestations before beginning treatment."

The spirochæte pallida is a slender, spirally curved organism, averaging in length from four to fourteen micro, though smaller forms are sometimes seen. When viewed through the one-twelfth oil immersion lens the organism is very characteristic. It is pointed at both ends and has from six to twenty-six tight corkscrew-like spirals, which show a tendency to become wider at the ends of the organism. It stains very lightly and as a rule only one

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or two are found in a field. Occasionally, though, they are found in groups, the so-called "agglutination of Levaditi." These characteristics serve to differentiate the spirochæte pallida from the spirochæte refringens, the organism with which it is most likely to become confused. The spirochæte refringens, which is found in great abundance in smears from chancreids, is a much thicker and larger organism and stains much deeper. Its spirals are wavy and undulating and lack the tight corkscrew-like appearance of the spirochæte pallida. The technic of examining for the organism is comparatively simple. It is highly important that the greatest care should be exercised in obtaining the material for examination. If the lesion be a chancre it should be carefully washed with soap and water and any scabs or crusts removed. By squeezing between the fingers a little serum, very slightly blood tinged, is easily obtained, which should be obtained by scraping lightly with a sharp curette. Enlarged lymph glands may be examined by aspirating with an ordinary hypodermic syringe. Particular care should be exercised when making a diagnosis from smears from mucous patches and throat lesions on account of the presence in the mouth of numerous organisms of similar morphology. The best method of examining the blood is that recommended by Noeggerath. One c. c. of blood is mixed with ten c. c. of a one-third per cent solution of acetic acid. This is centrifuged for one hour and thin smears made from the sediment. The smears obtained should be dried in aid and fixed in absolute alcohol for five to fifteen minutes and stained. The stain with which I have obtained the best results is the one recommended by Schaudinn, the so-called Geimsa stain or azure blue eosin, which may be obtained already prepared from Leitz & Co., of Chicago.

One drop of this stain is diluted with one c. c. of distilled water and the fixed smear immersed in it for twenty-four hours. Lately I have been obtaining excellent results by diluting the stain one to three with distilled water and staining for two or three hours. The organism does not stain quite so deeply by this method but it saves time and I find it quite as effective. After staining, the specimen is mounted in balsam and examined with the one-twelfth oil immersion lense.

In searching for the spirochæte they are rarely found in the more deeply stained portions of the smear but are more apt to be

found in the thinner portions where the serum stains a very faint pink. This of course is only one of many methods of demonstrating the organism. Recent writers claim greater ease and accuracy of diagnosis by the use of the dark-ground illuminator. But whatever method be used the value of a laboratory diagnosis remains the same. Experience has taught me that no sore is too innocent looking to be above suspicion and it is my practice to examine microscopically every case which comes into my office, even down to the seemingly innoxious "hair-cut." In the past year I have examined some forty-odd cases, many of them referred to me by other physicians, and my results lead me to agree fully with the statements made by Dr. Corbus—in no case which I have been able to follow up have I failed to make a correct diagnosis. Some of these illustrate so aptly the value of a laboratory diagnosis that you will pardon my mentioning two or three.

Case 1—Mr. A., referred to me by another physician. He was much alarmed at a pustular eruption on the forehead and thought he had smallpox. He gave rather an indefinite history of a supposedly innocent sore and I suggested an examination for the spirochæte. Examination showed the organism and the eruption cleared up rapidly under mercurial treatment.

Case 2—Patient referred by same physician as Case 1 with an enlarged inguinal gland as large as my fist on one side. Very vague history; no skin eruption; examination of serum from the gland showed organism and the gland promptly went down under inunctions.

Case 3—Mrs. F., a lady of easy virtue, had two sores with hard indurated bases just below the vulva, which refused to heal under ordinary treatment. Repeated examinations failed to show the organism. She was under observation about four months, took no mercury; the lesions finally healed, and she never showed the slightest symptoms of syphilis.

Case 4—Mr. X. presented himself at my office with two small sores on the shaft of the penis. Examination showed the specific organism and I told him he had syphilis. He refused to take my diagnosis and decided to wait for secondary symptoms. In exactly five weeks he came back with a secondary eruption over his body and mucous patches.

The diagnosis of syphilis by clinical laboratory methods is as well established now as the diagnosis of tuberculosis or diphtheria. It is not in the scope of this paper to discuss the

value of technic of the Wasserman reaction. Suffice it to say that its practical value has already been proven. Dr. F. G. Harris, of Chicago, says: "The presence of the spirochæte pallida remains the only reliable method for demonstration of the initial lesion. The treatment of syphilis, however, should be controlled by the Wasserman test." It is too much to hope with these two diagnostic measures at our command that the day will come when the far-reaching effects of syphilis will cease to be a constant menace to mankind.

DISCUSSION.

Dr. Sanders—I don't know that I can add anything to the paper. It is a very excellent paper, and covers the field, but he mentioned one or two things that I wish to bring out, and that is the examination for the spirochæte; the method he gives is very lengthy and very tedious. I find the dark field on the plate is the quickest way and the easiest way to find the spirochæte. There are lots of spirochæte that resist staining altogether; they have very highly resistant powers, and are very refractory to the light, and very resistant to all staining. But, under the dark field illuminator they show up very plain; even thought they don't stain, they are readily seen. The dark field I use on the sections. Whether the tissues are there or not, the spirochæte loom up very visibly, and even show more than in the best staining method. Of course, Levaditi's is the best way of staining the section, but that requires about forty-eight hours. The dark field will bring them out better.

Dr. Hay—I wish to emphasize the point in regard to the use of the microscope with regard to a suspicious sore. A negative finding does not prove that a man has not got syphilis. I saw a case a year ago of a sore on the nipple of a woman. I made a diagnosis by finding the organisms. Of course, as a rule, if you go down deep enough, because they don't stay on the surface, if you go down into the derma, you generally get them. But in my first experience, I did not go low enough. I used the Goldhorn stain. Metchnikoff said that sometimes he looked all day to find one. That was probably due to his early faulty technic. If you go deep enough, you will always find them. Of course, if your patient has been under mercury, then your clinical picture, as a rule, is changed. If you take him off of mercury awhile they come back. They disappear under the effect of mercury just like the plasmodium does under quinin.

Dr. Bledsoe—Dr. Sanders spoke about the dark-ground illuminator. As I said in my paper, that this is only one of many methods of finding the organism. I have not had enough experience with it to be able to say, but I have had a great deal of experience with the other laboratory methods and it is certainly very easy to do. Dr. Hay brought out a good point when he said in getting your material to be sure and go deep enough. You take a chancre. It should be scraped thoroughly, cleaned and then curetted; take a piece of cotton and get all the blood away; then take it between your fingers and squeeze it out, so that you get the serum deep down in the chancre. There is no doubt about the matter that the deeper you go, the better your material is, and the more apt you are to find them.

VENEREAL PROPHYLAXIS.*

G. O. Hebert, M. D., Hot Springs.

"The relation that any disease bears to the public health is in direct ratio to its prevalence and its preventability."

In discussing diseases which are thought to owe their origin to pathogenic organisms, modern science demands consideration of the possibility of preventing the spread of the contagion, or of eradicating them by destroying their sources of infection.

During recent years evidence of the appalling prevalence of venereal diseases has been accumulating with ever-increasing force; and if evidence of their preventability is lacking, this is due to the prudishness of our morality, the inherent sluggishness of public opinion, and in no small degree to the unwillingness of medical men to take part in the campaign of prophylaxis.

Increasing interest in this subject is being manifested. The International Society of Sanitary and Moral Prophylaxis, with its national and local branches, is the first fruit of an awakened public appreciation that there is work to be done in the prevention of social diseases in general; and the increasing tendency of medical men—in meeting and through current medical literature—to discuss this subject are encouraging signs of the future attitude of the profession.

The three important points to be considered are the prevalence of venereal diseases, their

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effect upon the community (through marriage and otherwise) and the prevention of these diseases.

The great prevalence of venereal diseases is generally accepted. The current statement that some 60 to 80 per cent of young unmarried men suffer, at one time or another, from gonorrhea has almost ceased to evoke comment.

Gynecologists have come to agree that 60 to 80 per cent of pelvic suppurations requiring surgical interference are due to gonorrhoea, and to recognize that no class of society is spared by this terrible scourge.

The public mind is not so enlightened concerning the alarming prevalence of syphilis. This disease is considered so disfiguring that most people will not realize how their fellows, whom they see daily in apparent good health, mingling with the rest of mankind, can yet be syphilitics. The proportion of syphilis to gonorrhea is shown to vary from one to eight to one to fifteen. Fournier is, if anything, more pessimistic in his oft-quoted statement that among syphilitic women coming under his office care, one in five is a wife infected by her husband.

With these remarks upon the prevalence of venereal diseases and a passing reference to their effect upon the community—pointing out that the sufferer is a constant menace to his fellows, whom he may infect accidentally at any moment; that this danger is greatest to those nearest and dearest to him, to his mother or sister, and, above all, to the wife he marries and the children he begets, I am led to a consideration of my subject proper—the phase of the question assigned me for discussion on this occasion, namely, Venereal Prophylaxis.

In considering the necessity for general prophylaxis and the direction which efforts towards the accomplishment of this end should take, it should be remembered:

First. That venereal diseases are of great antiquity, and are likely to continue indefinitely.

Second—That these diseases already affect a large number of the population, and that by means of their many forms of inoculation and transmission, they are rapidly spreading still farther.

Third—That the existing means for their treatment among the poorer classes are insufficient, and that the establishment of institutions for that purpose or the endowment of special wards in our general hospitals is a measure eminently worthy of the attention of the public-spirited and benevolent.

Fourth. That the most common mode of propagation is by irregular or illicit sexual intercourse, and that therefore we should turn our main efforts at present in this direction, while endeavoring at the same time and in every decent and proper manner to guard the community at large from the effects of ignorance.

Fifth. That prostitution arising in response to the demand for this illicit indulgence has, like venereal diseases, existed from time immemorial, and is not likely to disappear.

Sixth. That prostitutes themselves need protection and have claims on the humanity of the law.

Seventh. That the infected male as a source of propagation should receive equal consideration with the prostitute.

Eighth. That by means of supervisory legislation and control of prostitution the unlawful sexual commerce may most readily be restricted and the spread of these diseases diminished.

Ninth. That there is sufficient evidence that such control and restriction, though surrounded with difficulties, may result in highly important advantages.

We may begin without much fear of contradiction by urging the necessity of a more general and more accurate public knowledge concerning the gravity and the prevalence of these diseases. The innocents—who are also in this respect the ignorant—members of the community have claims which we who seek to fulfill the highest function of our profession—the preservation of health, individual and national—cannot conscientiously disregard. Every adult individual should be aware for his own sake of the possibilities of contamination which surround him; every parent should be competent to protect his wife and children from all indirect infection; every wife should know that by permitting the approaches of a syphilitic husband she herself becomes liable to disease, and to the creation of a being which has few chances for life and still fewer for health and happiness; and every victim of venereal infection should realize that except after certain intervals and under proper restrictions, his marriage is an outrage to the woman he professes to love and a crime against society.

Once let these facts be clearly understood and this information widely diffused and an important step will have been taken not only in preventing accidental and guiltless

contagion, but also in preparing public opinion for the legislative measures which are believed to be desirable. We should in every way encourage the presentation of this matter to the community at large, by means, for example, of discussions in health societies, and by careful, truthful and forcible statements to our friends and patients, who are frequently eager for information on the subject. There can be no doubt that the greatest good can be accomplished by instruction from individual to individual. In this, much tact is required, and it is here that the family physician can do an infinite amount of good.

The individual prevention of venereal diseases is practically futile. The only certain method of escaping is the avoidance of exposure. When consulted in regard to prophylaxis, the physician should insist upon this point and need not volunteer further information, though, under proper circumstances, he should not withhold knowledge as to the means by which the danger of contagion can be lessened, if not entirely avoided. The avoidance of intercourse when there is an abrasion or any surface break about the genitalia, the local use of protective and antiseptic ointments, applications of mild antiseptic lotions immediately before and immediately after coitus, circumcision in persons with redundant or phymotic foreskins, immediate antiseptic applications to and superficial cauterization of abrasions acquired during coitus. These all diminish the danger of infection. For gonorrhea, the method of prevention generally accepted as the most reliable is the use of injections into the anterior urethra of mild silver solutions following through cleansing of the parts and urination, and applied within ten minutes after coitus.

In the individual prevention of syphilitic infection, the result of experiments by Metchnikoff and Roux has placed information within our reach which is of the greatest significance. It was revealed that the *only* way in which they were able to destroy the virus of syphilis after inoculation was by applying within six hours a calomel salve. So universally preventative did this prove that they performed a confirmatory inoculation (with monkey controls) upon a medical student, inoculating him with the virulent secretion of a chancre and of a mucous papule, rubbing in the calomel salve within one hour, and watching him long enough to be sure that no sign of syphilis developed. Hence we may infer that the only personal prophylactic against

syphilitic infection lies in the induction with a strong mercurial ointment within one hour of inoculation (and under proper circumstances as long as six hours). Since this announcement, however, there have been several cases of failure reported by experimenters, but it is evident that if it were possible to place this precaution in the hands of all persons exposed, the prevalence of acquired syphilis would be reduced to a minimum. For all practical purposes, however, it may be assumed that in order to control this disease as well as other venereal infections, they must be attacked as plagues.

Naturally the first attempts at control of these diseases have been directed against the prostitute. Various laws which have been enacted in different countries represent the attempts of the governing authority to protect the community at large from disease and infection by regulating the hygiene of and placing restrictions on the class most liable to spread the disease. There can be no doubt that these measures are of some benefit and it has been proved that clandestine prostitution, out of reach and control of these acts, is the great source of contagion in the countries in which they have been in force.

No method has as yet been devised which is in all respects unobjectionable or is capable of universal application. In the details of every plan yet proposed there has been much that was defective or even harmful and the subject is still one of the unsolved sanitary problems of the age. The effort to control prostitution has caused much conflict for many years between the advocates of licensed prostitution and the so-called purists—who oppose the system of licensing and control on the ground that such measures lend recognition to the evil and encourage vice. It may be admitted at once that if the total abolition of prostitution could be accomplished, and if it could be followed by the conversion of the army of harlots into peaceful housekeepers, and the transformation of their male patrons into pure law abiding citizens and fathers of families, it would be a most satisfactory consummation. No one, however, at the present day, with perhaps the exception of a few impractical, though enthusiastic and well-meaning persons, believes in the possibility of attaining such an end. The accumulated experience of mankind constitutes an unanswerable argument. All attempts at the extinction of prostitution present one unbroken rec-

ord of failure. The history of every country proclaims against it.

On the other hand, the adherents of regulation can show no marked improvement in morals or the occurrence of venereal disease. The chief causes of this failure are.

First. They attack venereal diseases, yet make no effort to improve the morals of the community, and so leave untouched the foremost of its causes.

Second. They examine the prostitute at most once a week and present her with a certificate of cleanliness. Admitting the accuracy of this examination (usually hastily made), the fact still remains that before the next examination she has probably risked contamination many times. Manifestly, such an assurance of cleanliness is not entirely effective.

Third. Venereal disease can never be stamped out by the inspection of licensed prostitutes so long as unlicensed prostitution remains unsuppressed (and who shall suppress it?), and so long as the men are not examined as well as the women. Would the suppression of any other infectious disease be taken seriously if only the infected women were reported while the men were allowed to go free?

A few fundamental principles which have been generally accepted may be summed up as follows:

First. Absolute continence does not in man or woman impair sexual instinct or appetite, nor does it diminish the procreative power. Moreover, the effect of continence upon the general health is beneficial.

Second. Apparent exceptions to this rule, cases of general or of sexual neurasthenia, impotence, etc., occurring in persons who do not run to sexual excess, may always, on close investigation, be attributed to such causes as: Some concealed vice, less frequently to mental incontinence, and rarely to systemic abnormality or disease.

Third. Sexual immorality of any sort, besides tending to disseminate venereal diseases, lowers the morals and assails the general health.

Fourth. The most important prophylactic measure is the protection of childhood; not the futile protection of assumed ignorance but the protection of intelligent instruction from a respected source, individual (parental if possible) at first, perhaps collective later, and advancing in accord with the awakening instincts of the individual.

Fifth. It is the paramount duty of the physician to instruct every patient treated for venereal disease concerning the grave danger of infection, especially in matrimony.

Such are some of the fundamental moral principles upon which the prophylaxis of venereal diseases must be founded. The application of the principles to the needs of children, the passage of laws requiring that venereal diseases be classified as infectious and reported to the board of health; the provision of adequate hospital facilities for venereal cases in place of the present refusal of hospitals to accept them; such practical matters we may hope to see thoroughly discussed in the future. In the meantime, it is our duty to present the facts to the laity and to stimulate discussion among them; and, realizing that the problem is a difficult one and the solution very remote, and recognizing the prevalence of venereal diseases as well as the destruction of life and happiness which they cause, it is surely essential that we as medical men should gravely consider not only the method of their cure but also the means of prophylaxis.

In the preparation of this article, I wish to give credit for liberal quotations from the excellent writings of Drs. White and Martin and of Dr. Keyes upon this subject.

DISCUSSION.

Dr. Norwood—I have enjoyed the reading of Dr. Hebert's paper very much. The first thing I noticed was in his statistics; he stated that from 60 to 80 per cent of all unmarried males are afflicted with gonorrhea. Perhaps those statistics are true, especially in Hot Springs. But I am sure that in the country districts no such per cent prevails, the authorities to the contrary notwithstanding. It was growing quite late when I received notice that I was to discuss this paper, and, having had but very little experience in the treatment of venereal diseases of any kind (because we have but few in the country), I thought I would look up some of the authorities, and found an article on the prophylactic treatment of syphilis in White and Martin's book, on page 1004, and thought I would give it to you today, but Dr. Hebert beat me to it. For that reason I will not have anything else to say.

Dr. Sweatland—This question is one of vital importance to us, it seems to me. So far as the reduction, or even any great reduction, in venereal diseases will be brought about, it

never can come until the public are educated up to that point. Right here, on tuberculosis—I cannot get up without saying something about tuberculosis—we don't realize the fact that in that disease, even, it can be treated with very little trouble, a disease not covered up like venereal diseases are. I want to say that venereal diseases will never be eradicated nor even mitigated, until woman demands of man the same that man demands of woman. I am not saying that in disparagement of woman, because no man has a higher esteem for woman than I. But I know this to be true, and we all know it to be true. It lies with the woman. Now, woman does it through ignorance, and it is only through education that this can be overcome.

Dr. Olive Wilson—How can woman exert an influence as long as the physicians or every one else says, "Hush; be silent?" In the State of New York in 1907—I may not get the statistics just right—there were about 1,200 deaths due to alcoholism. The Woman's Christian Temperance Union is the most thoroughly organized organization in all the world, organized to fight alcohol. In the State of New York in 1907 there were about 6,000 deaths due to tuberculosis. In the State of New York there were over 14,000 deaths due to the social diseases. This afternoon we had a very interesting and helpful discussion on tuberculosis after the exhibition of clinics by Drs. Walt and Sweatland. Every one spoke of the ravages of tuberculosis; it seemed that they could think of almost nothing else. I long to see the day when we will have an organization thoroughly aroused against the social evil as much as we are against tuberculosis.

Dr. Hebert—I have nothing further to add. The discussion of this subject is, naturally, a very trite one, one we all know, and have known, and should know. But it has been given too little publicity, and too little attention in our gatherings. I take it that our little, feeble efforts here this afternoon are merely to stimulate some discussion in that direction. I am glad my friend, Dr. Norwood, who opened the discussion, lives in such a moral community. I congratulate him. (Laughter.) However, I believe that the authorities, in stating that the average or percentage of the existence of this disease is rather high, have taken into consideration his community as well as others and merely give us an average.

As to the discussion by Dr. Wilson, I was glad to hear her. Her remarks brought to my

mind one point which might have been mentioned in my paper, which I overlooked, and that is the role which alcohol and drunkenness plays in the dissemination of venereal diseases. We all, of any experience in the treatment of this class of diseases, know from the histories that we get from our patients that a large percentage of them undoubtedly have contracted these diseases while in a drunken state. They forget themselves; they don't know what they are doing, and they will take chances and expose themselves while drunk, when in a more normal condition it would never occur to them. So that the question of drunkenness plays a great part in the prophylaxis of these diseases as well as in many others. I thank you for your attention to the paper.

Dr. Wood—I often get some monographs from some paper that some gentleman has read in the medical societies. I want to know if the best thing that the Arkansas Medical Society could do would not be to have this paper printed in a monograph and sent out broadcast over the State of Arkansas? This will diffuse information that is very badly needed.

ADDRESS OF WELCOME.*

Wm. Crutcher, M. D., Pine Bluff.

Ladies and Gentlemen—This meeting has been arranged in behalf of the Arkansas Association for the Relief and Control of Tuberculosis; not to ask your money, but to invoke your enlightened sympathy and support. This is a modern instance. Time was when the physician, hedged about by the dignity and reserve of an ancient and honorable calling, concealed his ignorance by a wave of his hand or a movement of his head. He followed an unwritten law that he must not talk to his patients; they asked too many questions, and his answers served only to confuse them. Thus he encouraged that reverence which ignorant minds always show the follower of a mysterious calling. Today all this is changed. The doctor knows. He knows above all things how much he knows and how much there is to learn. The people know, too. They are intelligent and inquisitive. Their questions today are answered in simple language or are met by the frank response, "We do not know." The physician is becoming more

*Read before the public meeting on tuberculosis, at Pine Bluff, May 20, 1909.

and more what he should be, a counsellor and advisor, and less and less an administrator of medicine. In studying the relations of the medical profession with the public, we meet striking paradoxes. The strangest of these is the fact that physicians, who earn their bread off the afflictions of the people, have ever been solicitous for the prevention of disease. The profession has been jealous of its living; it has insisted on your support, but the man who prostitutes his calling to the level of a pure business has always been in bad vogue with his colleagues, more jealous of good repute than envious of dollars. The whole history of medicine is a story of unselfish devotion to the public health. Let us look at the record and see what has been done, in order that you may gain a clearer conception of what is yet to be done. A little more than a hundred years ago Jenner made the famous discovery that vaccination either mitigated or entirely prevented smallpox. Smallpox, when carried by the Spanish soldiers to Mexico, in 1518, found a fertile soil, and ere the epidemic subsided three and a half millions succumbed. The annual death list in Europe was for many years about four hundred thousand, and nearly that many died in England alone in one year. But successive generations of vaccinated people have so nearly rendered us immune that today we pay very little attention to it. In the last 2,200 cases reported there were but eleven deaths, and all the recent epidemics have been so mild that but for an occasional malignant case the horror of this loathsome disease would be a fading memory. Typhus fever, the jail or ship fever of our ancestors, the great pestilence that in the eighteenth and the early part of the nineteenth centuries devastated armies and prisons and harbors, is unknown to you. It is almost unknown to us. An evidence of its malignancy is the fact that one million cases occurred in the British Isles in one year, of whom three hundred and fifty thousand died. Only a few scattering cases occurred in the United States between the great epidemic of 1836 and a sudden outbreak in New York in 1893, and since then only single cases have been reported in this country. There is scarcely a physician within the sound of my voice who ever saw a case of this disease, and, but that Ireland, its home, is too poor to carry out sanitary measures, typhus would today be extinct. There was a time when cholera was an appalling horror. In 1833, and for a few years afterward, it struck down our peo-

ple like a blight. The only time in the last third of a century when it has endangered the people of the United States was in 1893, when flies carried it from a cholera-laden ship in New York harbor to a meat shop in Jersey City. The plague, the pest, the black death of the Middle Ages, the formidable Oriental disease occurring in dirty quarters and borne by rats, has reached our Pacific shores several times, but has never come any farther east than San Francisco. Diphtheria, the grim destroyer of childhood, the mocker of parental love and hope, has been subdued—almost conquered. A death rate of from 40 to 60 per cent has been reduced in two hundred thousand cases, seen early and late, to less than 7 per cent, and in cases seen and treated with antitoxin during the first day, to about 1 per cent. Yellow fever, the scourge of the South, the wrecker of homes and fortunes, has gone from us forever. In all the annals of American achievement there is no more thrilling story than that of the yellow fever commission sent to Cuba by the government to find the cause and cure of this dread disease. Reed, Carroll, Lazear—three heroes of American medicine. They bared their arms to the deadly mosquito that you and I might be saved from yellow fever. They had slept with the mosquito before and they had slept with yellow fever patients, but now the little pest was loaded with the virus from the blood of a victim. Lazear died and was buried on foreign soil. Reed came home and died of pneumonia. Carroll survived a few years longer, and the medical profession is today lifting a mortgage from the home that shelters his wife and children. This is not all that has been done. The average duration of life has been increased one and a half years, and this not by the practice of medicine and surgery, but by the prevention of disease. Every human being born into the world lives one and one-half years longer, on an average, than he did a quarter of a century ago. We have learned and taught the value of sunlight and fresh air, of pure water and clean milk, of plenty of sleep and recreative exercise, of the proper disposal of garbage and sewage, and of screening against flies and mosquitoes. In the list of problems yet to be solved, malaria, typhoid, pneumonia, meningitis, and tuberculosis stand pre-eminent. Malaria is almost perfectly understood, and depends entirely upon personal hygiene and the elimination of the mosquito. Typhoid is absolutely preventable, being due to bad water or to bad milk, or to that worst

of all pests, the housefly, carrying it from the sick to the well. Meningitis and pneumonia we may never be able to prevent, but it will not be long until a serum like diphtheria antitoxin will greatly reduce the death rate. And then the great white plague. When Koch discovered the cause of tuberculosis in 1882, it was believed that we would soon find a cure; but as the years go by it becomes more and more evident that the cure lies not in medicine, but in prevention and in supporting the vital forces. It is not within my province tonight to discuss any particular phase of tuberculosis, but one I shall mention to show that this is your problem and mine. Four young negroes died in one block in Pine Bluff in one year. Four have died in one house near Brewster's brickyard. A cabin near Kingsland has been responsible for nine deaths from tuberculosis. These people wash your clothing, cook your meals, attend your children. The approach of the disease is so stealthy and its workings so insidious that it will never be controlled by ordinary measures. It will require the persistent efforts of every one of us, and therefore the appeal. "Come, let us reason together."

PSYCHIC PHENOMENA.*

J. Z. Sexton, M. D., Siloam Springs.

Mr. Chairman—The subject chosen for this paper may doubtless impress some members of this society as one entirely too comprehensive to be dealt with by other than a profound student of psychological effects, by one who has had large experience with men and affairs and a sufficiently trained mentality to give good reason for the hope that is in him. Therefore, I feel it incumbent upon me at the outset of this effort to offer an apology for asking their indulgence in so weighty a field of thought. But before receiving my friend Doranti's card, with attached invitation to prepare a paper, I had determined to some time in the near future read a paper before either the state, county or district society on my chosen subject today, not because I felt that I could enlighten any of my fellow society members on the principles of psychology, nor that I had any new truths for them to ponder over, but was actuated solely by a desire to learn; not to minister, but to be ministered unto, and if in the reading of my paper here today I can stir into expression the ideas (and I know they are here) of the members of this society along this line, I will feel that my effort has been worth while.

Dr. Weir Mitchell has said that no man can be a good physician who is not a good psychologist. It is psychology that shows clearly why psychotherapy

works—why it has worked through all ages. We are all psychologists in degree. No man can long observe phenomena of the human mind without forming certain conclusions, which very conclusions may entitle him to be classed as among those possessing psychological peculiarities. I, myself, studied psychology while in college, but will say that, except for some classifications and divisions of the mind, I have retained very little of what I learned at school; but the substance of my remarks here today has been correlated from my own experience and observations in ten years of practice of my profession. I dare say the inspiration of most all papers read before medical societies has been experience of the author, and I am here going to describe one of my own cases under the head of hypnotic influence, which I will briefly take up. The scientific man who acknowledges himself today a disbeliever in hypnotic influence is confessing to an ignorance which has been inexcusable for the past thirty or forty years. Hypnotism, or, to the medical profession, psychic therapy, has had three periods. In its ancient period it was unknown, and yet was unconsciously the salvation of medicine. Without it the inane therapy of useless and usually harmful agents would have shelved medical research for centuries. In its mediæval period, or the period of beginning scientific medicine, its entity was only faintly recognized, yet it continued to act as the conservator of treatment. In modern medicine it has been isolated, analyzed, applied, but its scientific administration is not yet, but is a reservation for the final period of its evolution; until then Mrs. Eddy will keep her halo. Proof of the power of thought to produce psychic results is common. How long have we heard of the fear that turned a man's hair white in a night! Every doctor knows that intense anger has so affected the mother's milk as to seriously disturb the proper digestion of it by the infant. And the United States government a while ago, in a series of experiments, demonstrated that certain emotions produced corresponding derangement of certain organs. If there is in the mind, then, this very evident power to create adverse physical conditions, may it not also create favorable conditions? The processes of the body are all under the control of the nervous system, and the nervous system is a very real, live structure of living tissue. It is through the nervous system that life persists and illness is remedied, whether by mean of mind, or medicine, or food. Digestion, assimilation, elimination of waste, tearing down and building up circulation and respiration take care of themselves in health, because we are not conscious of the active, busy nerves. Now the emotions affect these processes. Fear parches the mouth by arresting the flow of saliva, tightens the throat of the unsophisticated physician who assumes to address a scientific body on psychic phenomena. Grief destroys appetite by checking digestion, assimilation, the demand for food. Joy and pleasant associations quicken the appetite, give strength and firmness to heart-beats. We blush or perspire under certain emotions. The heart hesitates

*Read before the Tenth Councilor District Medical Society at Fort Smith, Ark., March 16, 1909.

or even fails under sudden shocks of grief or joy. Fright so affects the secretions as to produce a sudden movement of the bowels. Worry, hat, fear, self-consciousness of the wrong sort are all mothers of unnumbered ills. In order that the thought cure may be effective, our diagnosis must be correct. We do not give a thirsty boy dry bread, nor do we prune our potato vines as we do the grape vines; and just so great the difference between the treatment demanded. The remedy accorded to the case may be surgery, antiseptics, internal medicine, diet, rest, exercise of mind and body, or mental suggestion.

I hope I have made my reasons clear for speaking to those who are interested in the influence of the mind over disease and health. Mind cure, like medicine cure, has its limits. To keep that fact in mind will keep a good thing from discredit and not deprive us of its benefits. If any cure whatever is wrought by suggestion—mark this—it is not by belief that the illness was imaginary; it is because thought, belief, resolution, expectation, good cheer, so long as our conscious life dwells in the body, send from the brain currents of force that play along those tangible nerves, but no mental influence will do what is not provided for in this nervous system and its laws. To do more is as much out of the power of mental suggestion as to put out a fire or heal the broken limb of a tree.

Hypnotism, psychologically speaking, has been classified as a dissolution of the objective and subjective minds with the suggestion or assuming the functions of either, at his will, but the fallacy of its being the exercise of a superior will power over a weaker one has long been dissipated in the fact it takes a reasonably strong mentality to receive suggestion under hypnotic influence. It used to be called Mesmerism, after one Mesmer, a Frenchman, who, having a strong, dominating personality, with the tact of compelling people to do his will, and being a quack practitioner of medicine, together with Father Hell, a French priest, found he was able to relieve a number of his neurasthenic patients by suggestion, going through considerable mystifying movements with them, but both he and Father Hell (who was the one who brought the religious element into it, as seems to be so necessary to inspire confidence in all movements, even to the present day), were superstitious enough to believe that powers were derived from a magnet Mesmer carried; also, it being in the days of astrology, the planets were supposed to exercise their influence in his behalf. Mesmer's results were such that the French government appointed a commissioner to investigate his methods, but they reported exactly what he told them about the loadstone and planets. He afterwards discarded the loadstone, as he lost it for a while and found it did not detract from his powers. But it remained for a German, named Loeb, to classify, after scientifically studying the phenomena of Mesmer, and place it on a scientific basis, renamed hypnotism.

The hypnotic phenomena which came under my observation and care was that of a woman, aged

fifty-nine years. She was the mother of eight or nine children, and always had lived in peaceful harmony with her husband and children. The family was in very moderate circumstances, but she was possessed of some education. Her husband was a kind of local Christian preacher, with a great many hobbies, which he took up very easily. About four years ago he sent for some books he saw advertised on hypnotism, and, after reading and discussing them for some time, told his wife he believed he was possessed of hypnotic powers and was going to experiment on her and the family. She consented, and proved to be a very susceptible subject to his chicanery, the rest of the family not paying much attention to his efforts. After repeatedly putting the spells on her, as she described it to me, she conceived the idea that he was striving to get rid of her, so as to get another wife. Now, this may have been a case of delusional insanity or pathological instead of psychological, but she was under my observation for so long, and I could find no other indications, that I believed it purely psychological. In fact, her mental faculties, in every way that I could test them, seemed to be above the average for one of her station of life. She believed so fully in her husband's power and his intentions toward her that she finally left him and several children and came to me with her troubles. I tried to disabuse her mind; also her husband, when he found what he had done, made promises to her, and really thought lots of her. So, acting under my advice, she returned to him, but in a week or two developed a neurasthenic condition. I went to see her at which time her husband, with tears in his eyes, told her he had nothing to do with it. Her tongue would become coated with a grayish coat, her breath offensive, pain in epigastric region, headache, quickened pulse, and numerous other marked symptoms. She again left her husband, and, coming to town, placed herself under my care. I realized a peculiar case and tried some psychiatry on her, with almost instantaneous and marked success. My methods were entirely suggestive, and, while I do not lay any claim to possession of qualifications for a good suggestive therapeutician, and as a whole only believe in it when scientifically applied, robbed of all the mystifying fakisms with which it is naturally associated, yet I am sure of my results in this case. She rented a house in town, and finally her children came to her and she lived in perfect health and contentment, although it seemed to distress her that she could not live with her husband. Her husband, after a few months, paid her a visit, and, acting under my advice, she again endeavored to stay with him, occupying separate beds, but in two or three days she was back in the same condition. This was repeated a great number of times, always with the same results. This seems to be a case of hypnotism against hypnotism, but, it being my only experience along this line, I deemed it worthy of mention to strengthen my contention that there is great good to be derived from suggestive therapeutics.

Since the majority of our cases of neurasthenic states cannot be assigned to any definite cause, but are the manifestations of a diseased condition whose seat and nature are merely speculative, being probably partly of psychical and partly of physical origin, with no known pathology other than the indefinite pathology of cells undergoing fatigue, I think if the confidence of the patient can be obtained, psychotherapy is indicated, and more than any other remedy possesses the power to subdue the nervous suffering; at least it is worth the effort, and I consider it wholly in line without sane, practical methods of apply allopathic principles. We have sat idly by and allowed a clever New England woman to reap a rich harvest financially and obtain a following unprecedented for a woman, solely by applying to the frailties of mankind principles of healing which were known and applied—though, as I stated before, unconsciously—by Galen and Hyppocrates, the fathers of this profession. Mrs. Eddy, of course, is woefully unscientific; she has naught of the truth, and very probably herself does not realize the underlying principles of her success, which has caused her name and book to be known in almost every civilized country on the globe. But she struck a popular chord, which found a ready response in the human heart, when she surrounded the art of healing with a sacred cloak; her contention that all is mind and no matter, that the beautiful music we hear, the trees that we see in their gorgeous costume with which spring adorns them, the beautiful streams that leap from the mountain home to wind in silence through flowery vales, have no place in our economy, but are mere matters of the mind, we know to be a fallacy. As you think-eth, so you are, is her motto. We are willing to admit with Mrs. Eddy that thought is a dynamic force, but to be applied to control material conditions must be robbed of the assumed divine inspiration and scientifically applied to human needs.

There is no denying the fact that the Emmanuel movement recently started from Emmanuel Church in Boston is fraught with great good. It is a scientific move in the right direction, and, originating as it does in the birthplace of Christian Science, and from such an intellectual center as Boston, where multitudes are following in the wake of that false prophetess, will do more to stamp Mrs. Eddy's cult out of existence than the combined forces of truth-seeking scientific bodies the world over. If that were the only excuse for its existence it would be

reason enough; but it is more than that. It is showing to the world that Mrs. Eddy and her disciples have no monopoly on mental therapy, but that what little real good does come from her teachings (and it is more than overbalanced by the harm she does) has been known to science for ages past, and that scientific men are better qualified to apply these principles of healing. The movement would not receive much credence from the medical world were it not indorsed and actively participated in by the leading physicians of Boston, which includes some of the foremost practitioners of the world. The great difference between this movement and Christian Science, leaving out of the question Mrs. Eddy's false teaching about mind and matter, is this: Mrs. Eddy claims thought to be so powerful as to cure a broken arm or heal a gangrenous limb. It has no limit in her theory, and diagnosis is not considered. We know that all good resultant from the practice of our art depends upon a correct diagnosis and proper treatment of the same. Now, the physicians of Boston who have associated themselves with the thought cure movement are eminently qualified, and do make a correct diagnosis of all cases, those amenable to treatment by mental suggestion are given that treatment by themselves or turned over to some lay worker in the movement who is just as competent, if he or she has the confidence of the patient to administer the treatment as the physician himself. Beyond this, the ministers of Boston who instituted the plan do not attempt to go.

"So far as I know, and I have taken pains to find out, there is no such thing as cure of organic disease by mental influence," said Dr. Robert V. Cabot in an address at Boston, "but in the treatment of all functional disorders, which form two-fifths of all diseases, mental agencies are of great importance. I do not believe tuberculosis has ever been cured by mental means, but I have in mind tuberculosis patients who would get well if their worries could be removed."

I hope I have cleared the way for speaking to those who are interested in the influence of the mind upon matter of health and disease. The subject is in the air and the magazines, and, treating this voluminous subject so briefly as I have, I have had in mind several kinds of people, but particularly those who believe in getting at the root of a matter and not believing that one key unlocks all doors.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust building.

Editorials.

We are indeed glad to welcome the Dallas County Society back into the fold, and to Councilor Niehuss, whose work made it possible, we wish to extend congratulations.

The medical profession of Hot Springs and the state of Arkansas now have an opportunity to show to the people of the United States its unselfish devotion to suffering humanity and prepare for vigorous action. The fight now being made on the drumming evil at Hot Springs by Hon. Harry H. Myers, superintendent of the United States reservation, certainly deserves the commendation and hearty coöperation of every reputable physician in the state, regardless of cult or creed. The profession of Hot Springs should not be satisfied with the dropping of drumming doctors from the list allowed to prescribe the baths, but should see that they are prosecuted under the Gantt act and their license revoked.

The evidence which Superintendent Myers would require before dropping one from the list of eligibles would, it seems to us, be sufficient to convict him in our state courts.

To Superintendent Myers we would say, keep up the good work. You are not alone carrying out the laws of the land, but you are doing more for the poor unfortunates who seek the Mecca of health (through the Valley of Vapors) than could the combined influence of the medical profession of the state; for the motives of the profession are always questioned when it attempts any movement for the betterment of mankind.

4,000 CONSUMPTIVES STARVE YEARLY

MANY INDIGENT DYING CASES ARE BEING SENT TO SOUTHWEST.

Cruel and inhuman practices are alleged in a statement given out today by the National Association for the Study and Prevention of Tuberculosis against the Eastern doctors who persist in sending dying cases of consumption to the Southwest.

Fully 7,180 persons hopelessly diseased with tuberculosis annually come to die in the states of California, Arizona, New Mexico, Texas and Colorado, most of them by order of their physicians. The statement, which is based upon the testimony of well-known experts, and all available statistics, shows that at least 50 per cent of those who go to the Southwest every year for their health are so far advanced in their disease, that they cannot hope for a cure in any climate, under any circumstances. More than this, at least 60 per cent of these advanced cases are so poor that they have not sufficient means to provide for the proper necessities of life, which means that 4,315 consumptives are either starved to death or forced to accept charitable relief every year.

It is not an uncommon thing, the National Association declares, for whole families, who can hardly eke out a living in the East, to migrate to the West in the hope of saving the life of some member of the family. In most instances, the abject poverty of such cases forces them to beg, or to live on a very low level. Often consumptives who cannot afford the proper traveling accommodations are found dead on the trains before reaching their destination. The resources of almost every charitable organization in the Southwest are drained every year to care for cases which would be self-supporting in their Eastern homes.

It cost, on an average, at least \$50 per month for the support of a consumptive in the Southwest, including some medical atten-

tion. The National Association strongly urges no one to go to this section who has not sufficient funds to care for himself at least one year, in addition to what his family might require of him during this time. It is also urged that no persons who are far advanced with tuberculosis go to so distant a climate.

Consumption can be cured, or arrested in any section of the United States, and the percentage of cures in the East and the West is nearly the same. Any physician, therefore, who sends a person to the Southwest without sufficient funds, or in an advanced or dying stage of the disease, is guilty of cruelty to his patient. Renewed efforts are being made to stop this practice, and to encourage the building of small local hospitals in every city and town of the country. Attempts are also being made in Southern California and in Texas to exclude indigent consumptives or to send them back to the East.—Press Service of the National Association for the Study and Prevention of Tuberculosis.

THE QUEEN ALEXANDRA SANATORIUM, DAVOS.

The Queen Alexandra Sanatorium (under Her Majesty's patronage), which is to be opened early next autumn, is destined to rank high in the list of the National Sanatoria of cosmopolitan Davos. But though national it will be unique in welcoming patients from all parts of the world, and not only from the British Empire but the United States, as it was founded for the benefit of all English-speaking nationalities, the only qualifications needed being evidence of medical suitability and of inability to meet the heavier cost of treatment at hotels or private institutions. The following notice appeared in the *British Medical Journal*:

The prospective opening of the Queen Alexandra Sanatorium at Davos for the reception of patients early in this autumn was announced from the chair at the sixth annual meeting of the council, held at 11 Chandos street, Cavendish Square, W., London, on July 16, by the president, the Lord Balfour, of Burleigh, K. T., P. C., who has labored so long and successfully in the difficult task of raising funds. A splendid donation of \$125,000 lately received from a munificent sympathizer, who desires that his name shall not be published, not only supplies the amount required to complete the work and to open the sanatorium free

from debt, but provides means for its scientific equipment and for future extensions. It should be mentioned that Lord Stratheona, with his well-known zeal in the promotion of all charitable and useful works, not long ago gave a donation of \$10,000 for the purposes of the sanatorium. For the present the sanatorium will accommodate 54 patients, all in single rooms. But the public rooms are designed for a full complement of 120 patients. The Davos Invalids' Home, the original foundation of the late Mrs. Lord, which for so many years was the only representative of our national charity in Davos, has now ended its task and fulfilled the purpose for which it was initiated—that of developing into a national sanatorium. The home had been granted Her Gracious Majesty's patronage as far back as 1899.

AN OPEN LETTER.

Dear Doctor—A meeting of physicians and surgeons interested in Scientific Clinical Research is called for Wednesday, October 27, 1909, at John Ware Hall, Boston Medical Library, No. 8 Fenway, Boston, Mass. The meeting will come to order at 10 a. m., and carry its session through Wednesday, and, if necessary, through Thursday and Friday.

The object of the meeting is—

First, to establish an American Association of Clinical Research.

Secondly, to establish clinical research on an incontrovertible scientific basis in hospitals; and—

Thirdly, to institute an American Journal of Clinical research, in which the work of members of the American Association and of others doing clinical research work in a scientific manner shall be published.

You and your friends are herewith cordially invited to participate in this meeting and in the proposed movement of scientific clinical research.

This invitation is extended to all physicians and surgeons whose interest goes beyond the immediate case work of ordinary clinical societies; and it is hoped that the invitation will be accepted by all medical practitioners, irrespective of their present medical affiliations, who can appreciate the necessity for establishing on an incontrovertible scientific basis the certainties and limitations of the present practice of medicine and surgery before attempting to add to the already large and cumbersome field of medicine.

The American Association of Clinical Research is not intended to disturb the present medical affiliations of its members nor to interfere in the very least with the duties they owe and the privileges they enjoy by virtue of their affiliation with any existing national medical body.

The American Association of Clinical Research is to take cognizance of the fact that the clinic requires cold facts and conclusive methods, and upon these fundamental requirements the structure and the work of the American Association of Clinical Research are to be built.

It is of the utmost scientific importance to establish conclusively all that is at present true in medicine and surgery, and only upon such proved knowledge, to base any further advancement. The clinic deals with clinical entities and not, like the laboratories, with parts as entities. Therefore, clinical

research differs, and must differ, from experimental laboratory researches. Clinical research must consider clinical entities, and when considering parts, it must consider them only as parts and not as wholes. All that subserves the object of obtaining and investigating clinical facts and principles belongs to clinical research and the laboratory is a part of the means of clinical research, but only a part.

The crux of the matter appears to be that experimental laboratory proof is not sufficient clinical proof. In order to advance in an irresistible line, clinical research must be based on a conclusive form or method of clinical proof. In experimental proof, we dislocate a part from a whole and attempt to prove the whole from the part, as though a dislocated part could always prove the whole. Or, we attempt to prove facts in one species by facts in another species, as though the two species were identical. For instance, the experiments made on animals to elucidate certain elements of fever bring out a fact of almost insurmountable difference between man and the lower animals, the fact that man has associated with the nakedness of his body a highly perfected power for regulating his temperature, a highly developed vasomotor system and a vast array of sweat glands, a characteristic complex of things which apparently no other species of animal life presents. Experiments made on animals to prove febrile or other clinical phenomena in man, may be suggestive, but for obvious reasons cannot be conclusive. To prove observations in man, the observations must be made on man and not on animals. But observations on man even are not necessarily conclusive. Individual observations on man cannot be conclusive, because the same experience cannot be repeated, and when we prove by numbers, we compare similar but not identical experiences. Analogy is not conclusive proof. Identity alone is conclusive proof; but since, in medicine, identical experiences cannot be repeated, we must provide simultaneous identical experiences in order to have proof by identity. Clinical proof is conclusively established when all observations and experiments are made conjointly by at least two competent men, preferably of opposite ideas, at the same time. Conjoined critical observation and experiment, at the bedside and in the laboratory, as may be required, furnish simultaneous identical experiences, the proof proceeding on the principle that a whole can be proved only by the whole and not by dislocated parts.

These and other weighty questions await your assistance for a necessary solution. The benefit that will accrue, both to medicine in particular and to the medical profession and humanity at large in general, from a satisfactory establishment of scientific clinical research, can be easily surmised. Come prepared, yourself and your friends, to give to this matter your mature convictions and your personal assistance. Only from a critical interchange of critically acquired opinions can we hope for clearness and for the clarification of the medical atmosphere now charged with confusion and indifference.

Your communication, indicating your interest and your expectation of being present at the meeting in Boston on October 27, next, is eagerly awaited, and on receipt of the expression of your interest, further developments will be communicated to you personally in due time.

Please address your communications at the earliest possible date directly to James Krauss, M. D., 419 Boylston street, Boston, Mass.

Yours fraternally,

Signed: JAMES KRAUSS, M. D.,
Chairman Committee American Association Clinical Research.

419 Boylston street, Boston, August 18, 1909.

A BOOSTING CLUB.

To the Editor—Why not a "Booster Club" or "Praise-Your-Brother Club" in the American Medical Association, with no dues or other requirements except that each member pledge himself never to speak unkindly or in criticism of a brother physician to the laity, except that physician be also present. Let us renew our vows and wear buttons to show that we mean to keep them.

If such a condition could be brought about we would be held in much greater esteem by our patients and neighbors. Whenever a physician is condemned, maligned or criticised by another physician, the ill will engendered in the minds of the laity is not against the one physician, but the class. Individuals are forgotten, and the profession is remembered as a whole. If I tell everyone I meet that Dr. Pill is a rank physician, knows nothing of medicine, and will stoop to any mean practice, the laity soon forget that Dr. Pill is a "poor doctor" and retain the impression that we are all "poor doctors," ready to stoop to anything.

Let's stop it; raise the standard. Can we get together at St. Louis and organize a club?

Yours for "no knocking,"

W. T. WOOTTON, M. D.

Hot Springs, Ark.

The above from the Journal, A. M. A., of August 7, 1909, agitates a scheme to the end that we may create a better general impression upon the laity, restore confidence in our profession and take away the foundation for so many pathies, religio-cures, etc.

Communications.

Wesson, Ark., Sept. 14, 1909.

To the Editor:

On September 9 I had the pleasure of meeting with a number of the physicians of Dallas county for the purpose of organizing a county medical society. It was indeed a very interesting meeting, with six present who were enrolled as charter members. All present showed a very deep interest in the meeting and all were filled with the enthusiasm and energy that is required to make a successful society. The regular constitution and by-laws, recommended by the State Society, were adopted and the election of officers resulted as follows: Dr. C. J. Marsh, president; Dr. O. R. Kelly, vice president; Dr. T. L. Rives, secretary, and

Dr. W. L. Worthington, treasurer. The other two members being Drs. H. H. Atkinson and Dr. F. E. Harrison. The charter membership was closed and the councilor petitioned for a charter.

H. H. NIEHUSS, M. D.,
Councilor Fifth District.

Personal.

Dr. Robert H. Sanders, of Brighton, has located at Manila.

Dr. R. C. Dorr, of Batesville, returned from Europe about the 1st.

Dr. Adam Guthrie, of Prescott, spent September 10 in the city.

Dr. I. H. Cuning, of Knobel, was a pleasant visitor in the city recently.

Dr. J. M. Taylor has been elected dean of the School for Nurses at Fort Smith.

Dr. Horace E. Ruff has moved from Pitman to Heber, and will erect a sanitarium.

Dr. A. E. Sweatland spent two weeks in Rochester, Minn., during the latter part of August.

Dr. Augustus Davis, of Texico, New Mexico, will locate at Osceola, Ark., for the practice of his profession.

Drs. J. P. Runyan and W. A. Snodgrass have returned from their trip abroad, and report a pleasant and profitable trip.

Dr. S. A. Southall of Lonoke, councilor of the Third District, was a pleasant visitor to the office of the editor on the 8th inst.

Dr. J. S. Shibley, of Paris, the superintendent of the Tuberculosis Sanatorium, has just returned from a trip of inspection of the various tubercular hospitals throughout the West.

Deaths.

Dr. B. L. Stovall, of Lonoke, died at the Physicians and Surgeons' Hospital in this city, September 15, of Bright's disease.

Dr. T. J. Bullock, of Bald Knob, 44 years of age, was stricken with paralysis Thursday, September 2, and died the following day.

Dr. T. D. Hare, of Greenville, Tex., died June 4. He formerly lived at Vannsdale, in this state, where he practiced for a number of years.

Dr. D. M. Dunn, of Canada, died recently at Dell, Ark. He was well qualified, and had been a member of the Mississippi County Medical Society.

Dr. James Thompson Valliant, of Killeen, Tex., died at Wintersburg, Cal., July 17, 1909. Dr. Valliant practiced his profession for a number of years at Falcon, Ark.

News Items.

The First District Medical Society will meet in Jonesboro Tuesday, October 12, 1909.

St. Vincent's Infirmary, in this city, is to have a \$50,000.00 addition. This is brought about by an act of the last legislature which requires the railroads to maintain a hospital in the state for their employees. The Rock Island has utilized St. Vincent's for several years. The Iron Mountain has made similar arrangements.

The board of trustees of the Arkansas Tuberculosis Sanatorium left Little Rock September 20 to look over the proposed sites offered for the sanatorium.

NOTICE.

Through an oversight of the editor, the name of Dr. S. A. Southall appeared as councilor in both the First and Third districts. Dr. H. R. McCarroll, of Walnut Ridge, is the councilor of the First district and Dr. Southall of the Third.

County Societies.

JEFFERSON COUNTY.—The Jefferson County Medical Society met in regular session at the office of Drs. Scales & Duckworth, September 7. House called to order by the president. Members present: Drs. Woodul, Brunson, Williams, Glover, Duckworth, Jordan, Caruthers, Jenkins, Luck and Lowe. Minutes of the last meeting were read and approved. The chairman of the committees on finance and general arrangements being absent, no report was heard from them. Dr. Breathwitt read a paper on the relation of the general practitioner to the specialist. His paper elicited a free discussion. Dr. O. G. Blackwell sent a written notice to the society that he had appealed his case to the council of the state society. It was moved and carried that his notice be filed and the instruction in our constitution be carried out. It was moved and

carried that we reconsider our vote of last meeting on insurance resolutions. Dr. Caruthers introduced a resolution to amend the constitution in section 3, chapter 2, which prohibits our making agreements and schedule of fees, so that the society may make a schedule of fees at their pleasure. Placed on table for thirty days. Dr. Jenkins read resolutions on insurance examinations, which were also laid on the table for thirty days. The society adjourned to meet at the next monthly time of meeting.

W. T. LOWE, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society met at Luxora Tuesday, September 14, with only a few members present. Dr. Thos. F. Hudson read an interesting paper on penetrating wounds of the abdomen, with report of case. October being the best month for collections, it was decided to have the next meeting November 9, at Osceola.

O. HOWTON, *Secretary*.

YELL COUNTY.—Yell County Medical Society met in regular session at Dardanelle, August 10, 1909. Present, Dr. J. R. Linzy, president; Dr. A. H. McKenzie, secretary and treasurer; members, Drs. M. A. Worsham and L. R. McCarty, Centerville; C. C. Brown, Chickalah; J. L. Albright, Balloon; Ben E. Cunningham, Dardanelle; visitors, Dr. C. P. Meriwether, councilor for this the Eighth District, and Dr. Robert Caldwell, both of Pulaski County Medical Society; Dr. L. R. Ellis, of Hot Springs, who is surgeon major of the A. N. G., now stationed at this place.

Dr. Meriwether gave us an excellent lecture on County Medical Societies, how to keep them up and make them interesting. Come again, Doctor; we certainly appreciated your visit, also that of Drs. Caldwell and Ellis, and invite them to visit us again.

Dr. C. C. Brown, of Chickalah, presented a case for clinic, diagnosed multiple neuritis by Drs. Meriwether and Ellis, who also recommended a line of treatment.

Dr. J. R. Linzy, of Dardanelle, presented a case of harelip and cleft palate, which had been operated on with partial success.

Several doctors paid their dues and were reinstated and others promised to pay soon. Also one subscriber to the Journal by a non-graduate.

If the State Medical Society will only allow it, I think nearly every undergraduate in the county will join us and be of benefit to us as well as themselves. A. H. MCKENZIE, *Secy*.

GREENE COUNTY.—The Greene County Medical Society met in its rooms in Paragould,

Wednesday, September 1. The following were present: Drs. Jones Lamb, Beech Grove; R. C. Bradsher, Marmaduke; Thad Cothren, Walcott; O. N. Hammett, Mitchell's Point; George Bridges, Bard; Paul Dickson, H. N. Dickson, W. R. Owens, J. R. Haley, F. M. Scott, O. Wilson, G. T. Hopkins and P. Robinson, Paragould. Dr. Jones Lamb contributed a paper on Constipation; Dr. Haley read a paper on Diphtheria; Dr. Olive Wilson a paper on Pneumonia in Children. Dr. F. M. Dickinson was admitted to membership. Program for the October meeting: Mitral Regurgitation, Dr. Bradsher; Aortic Regurgitation, Dr. Cothren; Ulcerative Endocarditis, Dr. Paul Dickson; Functional Heart Lesions, Dr. H. N. Dickson.

OLIVE WILSON, *Secretary*.

Book Reviews.

Osler's Modern Medicine: Its Theory and Practice—Volume VI. In original contributions by eminent American and foreign authors. Edited by William Osler, M. D., regius professor of medicine in Oxford University, England; honorary professor of medicine in Johns Hopkins University, Baltimore; formerly professor in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. In seven octavo volumes of about 900 pages each, illustrated. Price per volume, cloth, \$6.00 net; leather, \$7.00 net; half morocco, \$7.50 net. For sale by subscription only. Full prospectus on application. Lea & Febiger, Philadelphia.

Text-books may come and text-books may go, but Osler's Modern Medicine will stand as a monument to one of the world's greatest teachers for years to come. There have been many published, but few chosen of the many works on the practice of medicine that adorn the shelves and libraries of physicians all over the country. Modern Medicine leaped at one bound to the very crest of popularity, because of its real worth, and succeeding volumes, as issued, have only enhanced the value of the system, which is a library within itself. Volume VI deals with Diseases of the Urinary System, Diseases of the Ductless Glands, Diseases of Obscure Causation, Diseases of the Muscles, Vasomotor and Trophic Disorders, Life Insurance. Each subject handled by leading clinicians, teachers and investigators, whose names are authority throughout the English-speaking world at least. There is no man better fitted to undertake the editing of this magnificent work than Prof. Osler, and he has displayed good judgment in selecting his associates. As a library, this system, covering the entire range of practice, is indispensable to every physician who would qualify to the fullest measure of his responsibilities. C. C. S.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
 Second Councilor District—Clebune, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leali	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarroll	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunningham	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Osceola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Ouachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marvell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
Saline	J. M. Phillips	Benton	C. Prickett	Traskwood
Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Sumners	Elm Springs	Nina V. Hardin	Fayetteville
White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

POLYPHARMACY AND THERAPEUTICS, THEN AND NOW.*

Lorenzo P. Gibson, M. D., Little Rock.

The infliction of this paper upon the Society is the result of a very trivial accident. In rearranging some old books I came across one with the title, "Griffith's Universal Formulary—Thomas," and noticed that it was dated 1850. I glanced through it, was interrupted by the entrance of a "detail man," and, in placing it on a shelf, knocked down a copy of "Squibb's Materia Medica, 1908, Price List," which fell open at page 349, on which is printed "Tablets, Leucorrhea, Squibb, Plain."

I interpreted this as a challenge by the new to the old, and when opportunity came I compared the two publications and sent to the secretary the title of this paper.

It has been said of the late Lord Acton, the distinguished Cambridge professor of history, that for thirty years he studied faithfully, twelve hours a day, and, though often importuned by publishers to do so, never wrote a book, for the reason, as he said, that whenever he studied a subject with that end in view, he found the ground so thoroughly covered there was nothing which he deemed profitable to add. But mental pigmies do not learn from intellectual giants, else I would not be here today vainly endeavoring to boil down the immense amount of material that a cursory glance through publications has placed at our disposal.

Griffith's Formulary appears to represent fairly the prescriptions of that time. "The

design of this work," as stated in the preface, "is to present a compendious collection of formulæ and pharmaceutic processes, with such additional information as may render it useful to the physician and apothecary; and the principal aim has been to select materials most generally applicable and of practical utility. The sources from which they have been derived are very numerous, as will be seen by a reference to the various authorities cited."

The longest prescription found in this book is the formula for the "Vinegar of the Four Thieves.":

Wormwood; Roman wormwood; rosemary; sage; mint; rue; lavender flowers; garlic; calamus; cinnamon; cloves; nutmegs; distilled vinegar. Digest by a moderate heat, in a closely stopped matrass for twelve days, strain, express and filter; then add one ounce of camphor dissolved in alcohol.—Lewis."

Thieve's vinegar at one time was celebrated as a preservative against the plague.

As companion, I copy from the National Formulary, third edition, 1906, page 174, this formula, omitting the quantities:

"Tincture Antiperiodica" (Warburg's Tincture): I—Without Aloes—Rhubarb; angelica seed; elecampane; saffron; fennel; prepared chalk; gentian; zedoary; cubeb; myrrh; camphor; white agaric; black pepper; cinnamon; ginger; quinia sulphate; alcohol; distilled water."

It is fair to explain that both of these are old prescriptions, the history of Warburg's Tincture being well known; but the latter would hardly be continued unless it found favor today, and I can testify to at least one who prescribes it frequently.

As a more modern example of polypharmacy we present "Syrupus Pini Strobi Compositus" (National Formulary, 1906, page 167):

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

"Compound syrup of white pine; white pine bark; wild cherry bark; spikenard root; balm of gilead buds; sanguinaria root; sassafras bark; morphine sulph.; chloroform; sugar; alcohol; syrup."

This a popular cough syrup, is the one generally displayed, with slight changes of name and perhaps of ingredients, on the druggists' counters and bought by their patrons as a "family" cough syrup.

The longest formula in the United States Pharmacopeia, probably, is that for the compound syrup of hypophosphitis, which is well known, and contains eleven ingredients.

The "Tablets Leucorrhœa, Squibb's, Plain," first referred to, contain: Extract witch hazel; extract hyoseyamus; extract hydrastis colorl; extract helonias; alum; acid tannic; acid boric; eucalyptol; thymol; menthol. These tablets are not made exclusively by Squibb, but the prescription is found in most of the price lists of the manufacturing pharmacists. Nor does Squibb have a line of "specialties," as have most of the manufacturers.

As an example of a simple prescription for vaginal discharge, we give from Kelly's Medical Gynecology:

R—Ol. Mentha pip.; acid carbol; alum pulv.; acid boric; to be dissolved in water.

We must give one formula from H. K. Mulford Company's price list, dated January 1, 1909, because it is the latest one at hand:

"CHIL-CEDINE."

(Word Mark.)

*"Elixir Warburgae Compositum, Mulford,
For Malaria.*

"Each fluid ounce represents the active medicinal ingredients contained in Warburg's Tincture (without opium); Fowler's Solution; Iron Peptonate; Potassium Iodid; Cascara Sagrada; leptandra; podophyllum; uonymus; mercuric chloride, corrosive; quinidine alkaloid."

And under this formula is given in impressive words the "advantages" of this preparation.

Add to the nineteen ingredients of Warburg's tincture (National Formulary), the ten supplied by Mulford and we have the sum of twenty-nine ingredients. But we must give full credit to Mulford Company and say that Fowler's Solution is composed of arsenic trioxide, potassium bicarbonate, compound tincture of lavender and distilled water, and that

compound tincture of lavender is composed of oil of lavender flowers, oil of rosemary, Saigon cinnamon, cloves, myristica, red saunders, alcohol and water.

Canceling the water in the two formulas we at last have nine more ingredients to make the sum total of a 1909 prescription—thirty-eight medicines.

As a further compliment to the Mulford Company, we insert this extract from their price list concerning the "advantages" of their "Word-Mark" specialties:

"The H. K. Mulford Company's Word-Mark Specialties are favorite prescriptions, which, on account of their popularity with physicians, have come into general use by the medical profession. Owing to certain inherent properties, they cannot be advantageously compounded extemporaneously, and it is, therefore, advisable for pharmacists to carry them in stock to fill prescriptions. They are all provided with names which conform to scientific nomenclature, and fit them for a place in the United States Pharmacopeia, also with Word-Marks by which our brands may be specified. They are not advertised to the lay public, nor are they provided with labels and circulars with lists of diseases and directions for self-medication. Please order by Word-Marks."

As a pleasantry we suggest to this firm of medical purveyors that, notwithstanding our abhorrence of "substitution" they substitute for "Word-Mark" the "\$" and continue to—"whip the devil around the stump."

Lest some of our prophets may be without honor in their own country, let us serve a sample or two of home talent prescriptions, by members and ex-officers of the Arkansas Medical Society, who have attended our meetings, read some papers and discussed others. The prescribers represent different parts of our state. Here is one: Quinia Sulph.; Hydrastin Mur; Strych. Sulph.; Pepsin Cryst; Rhei pulv.; Podophyllin; Ipecac plv.; aloes soc pulv.; extract taraxacum.

Another is this:—Cubebæ pulv.; copaibæ; aluminis; sacchari albi; magnesia; olei cubebæ; olei santali; glycerizae pulv. co.

And for the third—Dextro quinine; quinsulph.; hydras mur; hyoseyamus, extract pow'd; codeina sulph; hyd. chlo mite; hyd. C. cretæ; nucis vom ext. pulv.; gentian extract.

In the private receipt book, which belonged to our old friend, the late Dr. J. J. McAlmont,

when he owned a drug store in Little Rock. I came across the subjoined, aged more than fifty years:

"Dr. P. O. Hooper's Alterative" (all of us remember the doctor)—Potass idodie, 3 drs.: syr. ferri proto iodide, 1 oz.; fld. ext. ascleps syriaca, 1 oz.; fld. ext. cistus canad, 1 oz.: fld. ext. stillingia, 1 oz.; fld. ext. sanguina canad, 2 drs.; fld. ext. sassafras laura, 1½ oz.; fld. ext. lappa minor sem, 1 oz.; syr. veronia fascie, * oz.; syr. dulcamara solanum, 4 oz., M. S. (directions).

On the shelf of a local pharmacist, May 16, A. D. 1909, was found a bottle labeled "Succus Alterans—Reg. U. S. Pat. Off.—Alterative Juice." And this is printed lower down on the label: "Succus Alterans is the preserved fresh juices of the true medicinal plants, stillingia, sylvatica, smilax sarsaparilla, phytolacca, decandra, lappa minor and xanthoxylum carolinianum."

The foregoing prescriptions are submitted without comment, hoping their variety is sufficient to add spice to their discussion. Comparing the prescriptions of fifty or sixty years ago with the practice of today, we find on the whole a vast improvement. The tendency is toward simplified therapeutics, and indeed that is largely an accomplished fact among the leaders of both the medical and pharmaceutical professions. Earnest and efficient work has been done to delete from the United States Pharmacopeia the elongated and complicated formulas once in general use, and if our therapeutic agents were selected wholly from that authority and the well-tested remedies developed between the periods of its revision, we would do much better and so would our patients. Commending their worthy objects in all things deserving it, we must censure the American Pharmaceutical Association for preserving in the National Formulary the obsolete United States Pharmacopeia preparations even though it is done in the appendix. They should let the discarded and worthless rest in oblivion.

Again, it should not be the bounden duty of the compilers of the National Formulary to devise imitations of proprietary medicines, or to introduce them under changed names, however popular they may have been with certain classes, perhaps more credulous than wise.

The greatest of all Books is the one most subjected to higher criticism by the ablest men, and if we find a little fault with the

United States Pharmacopeia and the National Formulary, that does not mean that we are ungrateful for the great good that is in them.

The polypharmacy of the present day is largely due to what I shall term "commercial therapeutics," or, to be stricter and still just, let us say "*mercenary therapeutics.*"

In several of the price lists of the manufacturing pharmacists not only are the formulas given, but they are explained and commended in such a way as to impress the credulous, careless or unthinking physician. For instance:

"Tablet Follicular Tonsillitis, Squibb. Plain—Tincture aconite, min. —; tincture belladonna, min. —; tincture bryonia, min. —; mercury iodide red, gr. —; morphine sulphate, gr. —; sodium salicylate, gr. —; oil wintergreen, min. —.

"The power of aconite to control inflammation and to subdue fever is easily demonstrated in the early stage of tonsillitis. In combination with belladonna, which counteracts its depressing effect, and with bryonia, a mucous membrane stimulant, it is said to act remarkably well, allaying the pain and inflammation, relieving the muscular soreness, quieting the heart and reducing the fever. Red mercuric iodid in small and repeated doses is believed to exert a positive influence over the mucous membrane in tonsillitis, and to relieve the inflammation, swelling and pain. Morphine acts as an anodyne and adds to the diaphoretic action of the aconite. Sodium salicylate serves to counteract the rheumatic tendency, which is often seen in recurrent attacks. Dose: One tablet, on the back of the tongue, every fifteen minutes for four doses, then every hour until relieved."—*Squibb's Materia Medica*, 1908.

Some years ago I was discussing with one of those ambassadors of mercenary therapeutics the merits, or rather the demerits, of the "Tablet Dyspepsia Farinaceous," containing ptyalin, diastase, pancreatin and pepsin, and jocularly remarked that what we needed was a digestive tablet combining the enzymes with time fuses, in such a way that the fuses would set the separate ingredients free in the respective divisions of the alimentary canal, where each was needed. That was intended as a joke, but on page 18 of the "Price List of Fine Products, 1907; Burroughs, Welcome & Co., London (Eng.), New York, Montreal, Sidney, Cape Town," I have discovered "Prepana Tabloid Brand (Trade Mark)." Its

therapeutic mechanism is illustrated by a mechanical drawing which, on careless inspection, might be taken for a pigeon egg or a Whitehead torpedo, or the landscape plan of an athletic field. This printing makes the construction perfectly clear: "This gastroenteric compound is unique in construction and effect. It is of superior value in those cases of dyspepsia where the stomach is not alone at fault, but where also the pancreas is not producing an active efficient secretion. Its scientific construction is shown in the illustration. The inner kernel contains pancreatin and calciumlacto-phosphate, enclosed in a coating of keratin; next follows the pepsin, surrounded by a covering of pure white sugar. The pepsin is liberated in the stomach to assist the action of the digestive juice, whilst the pancreatin is not released until it reaches its proper sphere of activity—the intestines—where it is set free by the solution of its keratin coating."

And yet, and yet: "The Nomenclature of Diseases, drawn up by a joint committee, appointed by the Royal College of Physicians of London, Third Edition," says, page 139: "419. Indigestion, synonym, dyspepsia. (Footnote.)" These, being names of symptoms, should be used only when the cause is unknown. When the cause is known, the return should be made under the head of such causes, the local condition being also specified."

So far our paper has led us along devious paths with confusing sign posts until we are lost in a maze of therapeutic inconsistencies, and it would be cruel to lead you into it, unless we can show you out. I am certain I can show you the way out, and with little difficulty.

After consulting more than a hundred books and price lists in the preparation of this paper, it must have been an inspiration that caused me to seek still further, and at last to be rewarded by finding the modest little Moses to lead us out of the Wilderness. And why it should be thought of in connection with mercenary therapeutics is a mystery. I am not going to give you the title and you must, therefore, forever remain in ignorance of the author of this modest little book. On the second yellow page is found this inscription:

"Presented to.....

With the Compliments of The Author.
(For Your Pocket.)"

Please note that it is "for *your pocket*." On the same page we read in large letters "The Trend of the Times is distinctly in favor of *Accuracy in Therapeutics*." * * * And take notice of this on the same page: "Doctor, it may seem hard to change your methods of practice and learn new ones. This is true only in appearance—the fact is that the (guess the word) method renders practice 'dead easy.' It is so natural—that's the secret. You examine a patient and prescribe for just what you see to be out of order—the diagnosis waits but treatment begins at once—and *it is treatment that cures*."

To illustrate this "dead easy"—or, as some wag might reverse into "*easy dead*" method, pay close attention to this on page 74: "*Pneumonia*—Start with the idea that this is a remedial condition and *treat the patient* (meeting symptoms as they arise); don't treat *pneumonia*. In full blooded patients begin with aconitin, veratrin, digitalin, one of each every fifteen to thirty minutes until pulse softens; then every half hour to one hour. Keep the pulse at 80 or under, if possible; envelop entire thorax in a jacket thickly "quilted" with raw cotton or the common cotton batten. Give a few doses of brionin or hyoscyamin and codein for pain. At the start clean out the *primac via* with one-sixth gr. doses of calomel and podophyllin, half hourly till a grain of each is taken; two hours after last dose give a heaping teaspoonful of Saline Laxative in hot water and repeat every hour till bowels move freely; then give five to ten grains of the Compound Sulphocarbolates' Intestinal Antiseptic W.-A. every two hours, or enough to keep the bowels sweet and clean, and then keep it so. This is of the utmost importance. *If seen early and properly selected remedies are pushed rapidly, nearly every case may be aborted.* If patient is naturally weak, give strychnin arsenat in place of veratrin. Codein may be used to quiet cough if required, and emetin to facilitate expectoration, cactin throughout and for prompt relief of heart waverings. Secure complete defervescence and rest, no matter how much drug is required. Nuclein solution should be given in doses of twenty drops three times daily on the tongue, without water and Calcedin (one) should be given, four to six times per diem. The diet should be of highly concentrated nutrients; the less waste the better. Sanguiferin and milk (one quart per diem) will prove efficient. Special article

will be sent upon request. Leave patient on strychnin arsenat, or triple arsenates with nuclein, and use the Saline Laxative and Intestinal Antiseptic throughout the case, and following as required."

Oh, that physicians should put a medicine case in their pockets to steal away their brains!

Something about this "Saline Laxative" causes the memory to run back to Griffith's Formlary, 1850, page 195, to a "*Mixture of Cochineal and Common Salt*":

"R.—Common salt, 3 drachms; powdered cochineal, 15 grains. Divide into six doses, one to be taken every morning, the last followed by a purge. As a vermifuge. *Rush*."

And our judgment is colored by the inquiry as to which is the more efficient adjuvant to salt or to "salts" cochineal or carmine No. 40.

The *aqua hirundinum cum castro*, or water of swallows with castor in the Pharmacopeia of Manheim and Wurtemberg was directed to be made as follows: "Take of young swallows bruised in a mortar, forty; white wine, three pints." This disgusting preparation was given in hysteria and epilepsy.—*Dunglison, New Remedies*, 1853."

A. D. 1909. "The ingredients of the P-H and P-H Special Lymph Compounds are the same in quality. The "*Special*" is about 20 per cent stronger. The ingredients of both preparations are as follows:

"*From Goats*—From young goats, eight to twelve months old, the following fluid extracts are derived in a highly concentrated form: Pure lymph from lymph ducts and glands, and pure orchitic fluid from testicles; concentrated fluid extracts—practically emulsions—of lymph glands, cord, medulla and gray matter of cerebrum and cerebellum.

"*From Bulls*—Concentrated orchitic fluid, taken chiefly from globus major and minor, immediately after castration.

"*Menstrum*—Carbonized distilled water, to which is added chloride of gold and sodium.

"Each minum of the lymph compound contains 1-300 grain—Price List."

"Emulsion of Lymph (Orchitic) Compound—All of the active ingredients of R-H. Lymph Compound are contained in the emulsion, with the addition of an increased percentage of the lymphatic and orchitic extracts. This addition is made possible because it is not necessary to prepare this preparation so as to permit of its being used subcutaneously."

"This emulsion or any other near equivalent of the original R-H. Lymph-Compound cannot be put up in *permanent* capsule form. Any soluble capsule will collapse in a few minutes. Therefore the capsule must be *swallowed* (italics mine) immediately after it is filled."—*Circular Letter of Manufacturer*.

In the introductory to Hygienic Laboratory—Bulletin No. 48—"The Physiological Standardization of Digitalis," the authors use these words: "One of the directions along which modern scientific medicine has advanced during the past few years is in the greater accuracy with which medicines are administered. A very essential factor in this tendency is that the drugs themselves should be of a uniform strength, and, to insure this, the Pharmacopeia of the United States, in its last revision, provided a number of standards to which official preparations must conform. Especially is this true in the case of a number of drugs, such as opium, belladonna, nuxvomica, etc., in which the active principles are capable of isolation in a pure form. With a considerable number of others, however, this was not found to be possible for the reason that the active principles are either not known or are not capable of being isolated in pure state by any known chemical method. In this class occurs such drugs in common use as digitalis and the other members of the series, ergot and cannabis indica."

The reading of this bulletin suggested the thought that it would be a consummation devoutly to be wished to have a government laboratory where not only single remedies but prescriptions could be subjected to a *therapeutic standardization*. But this is not feasible yet, and the best we can do is to stick to our United States Pharmacopeia, because the remedies and formulas admitted or rejected have been submitted to the very highest authorities that the medical and pharmaceutical professions can create.

With your permission I will conclude this paper after the discussion.

DISCUSSION.

Dr. Thibault—In speaking of commercial therapeutics, I have noticed lately—that is, in the last few years—that at first we generally have what I call perversion of pharmacology. A man gets out a drug in a new form and attaches to it a new physiological action, in order to sell it. He says that it can be used in other diseases than those for which it is in-

tended, and for other diseases than those in which our scientific knowledge of the drug would indicate that it was necessary. But this runs out after a while, and the drug loses its individuality, so he combines it in a tablet with several other drugs, and tells us that its wonderful curative powers are due to the "synergistic action" of the combined drugs. I suppose that this means that a given drug may act by catalysis with the four or five other drugs with which it is combined in the tablet on granule, and that by this means he hopes to obtain composite action by a method of one drug modifying the action of the other. Thus he will combine aconitin, strychnin, digitalin, netroglycerin and a few others in a single tablet; assuming that when the circulation is depressed too much that the strychnin and other stimulants will "boost it up" a little; and that when it gets over stimulated and the blood pressure is too high, the aconitin nitroglycerin, etc., will bring it down again. In this way the tablet acts something like the automatic regulator on an incubator, whenever the pulse and blood pressure gets too high or too low.

"Now, if you have a patient who is depressed and sweats too much, or one who is over-stimulated and does not sweat, then it is that this combination gets in its work. All you have to do is to give some of these tablets and the 'synergistic action' of all these drugs together will adjust and regulate your patient just as the thermostat regulates your incubator; and he never will go wrong again if he keeps on taking them."

Another feature of this commercial therapy is the tablet or granule of very small dosage, so that one patient may have to take a thousand of them before he recovers. Of course, you have to buy the thousand tablets, or your patient has to do the buying, and in either case the manufacturers enjoy the selling.

Dr. Walt—This is a fine paper and a timely one. I enjoyed the doctor's clear style and terseness and heartily endorse his essay. I do not believe that all the writing and all the printing and all the trashy literature that the advertising man can produce should induce the physician to impose a drug upon a patient until he studies and knows the physiological effect. A doctor should not prescribe a drug if he does not know its physiological effect.

Dr. Gibson—Replying to the statement of Dr. Walt: If all the doctors knew their "physiological effect", there would be no such

thing as a ready-made prescription used by a physician. He would consider it an insult for a manufacturing pharmacist to bring him a prescription already made up.

If a representative of one of our large artists' material manufacturers should go into the studio of an artist and say that he had in one tube of cobalt, blue, white, black, green, yellow, red and all the other necessary pigments that go to make up the complexion, and that all the artist needed was a brush and piece of canvas, and for him to take that brush and smear that paint on the canvas to produce the portrait of a man, woman, child, or anybody else, sick or well, according to his fancy, it would be deemed too absurd for consideration. It is just as preposterous for a man to go into the office of a physician with a ready-made prescription and try to make him use it. The idea of anybody coming into a doctor's office with ready-mixed prescriptions and selling them by the thousand, and the doctor having no information or guaranty as to their efficacy, except the word of the man who is "detailing" it! It is just as preposterous as making portraits from ready-mixed paint. You cannot find them commended in Anders, Hare, Osler or any other work on therapeutics, materia medica or practice, and yet they are prescribed by the thousands. It is a shame that such erroneous and ridiculous ideas should prevail.

I will now finish the paper with words of two great men. In the preface to *New Remedies* (Robley Dunglison, 1853), the author writes: "The erroneous idea prevails too extensively that every one is capable of profiting by observation, and that, therefore, all who have had the same amount of experience must be equally capable of treating diseases. Setting aside, however, the consideration of the differences that must necessarily result from the varied powers of individuals, it can scarcely be maintained that he whose attention has not been properly directed to the study of the preliminary branches which have been enumerated, and whose mind has not been trained in tracing the relation between cause and effect, can ever duly profit by mere experience in that which has been properly termed 'the most inductive of all sciences.'"

"To treat disease effectively and methodically, the nature of the actions of the living tissues, in both the healthy and the morbid condition, must be correctly appreciated; the effects which the articles of the *materia med-*

ica are capable of exerting under both those conditions, must be known from accurate observations, and not until then can the practitioner prescribe with any well founded prospects of success. Numerous errors would be perpetrated, were we to profess, and to carry out such profession, that we are guided by experience alone, unless that experience had been gained by a due consideration of all the physiological, pathological and therapeutical bearings of the subject. In illustration of this, the well known case cited by Dr. Paris in his Life of Sir Humphrey Davy may be adduced. The enthusiastic Beddoes, having hypothetically inferred that 'the inhalation of the nitrous oxide might be a specific for palsy, a patient was selected for trial, and placed under the care of Davy—at the time assistant to Beddoes. Before administering the gas, Davy thought of ascertaining the temperature of the body by the thermometer placed under the tongue. The paralytic deeply impressed by Dr. Beddoes with the certainty of the success of the remedy, of which he knew nothing—soon after the thermometer was placed in his mouth, believing this to be the curative agent—declared that he felt somewhat better. Nothing more was, therefore, done; and he was requested to return on the following day. The same form was gone through with the same results; and, at the end of a fortnight, the sick man was dismissed, cured, no agent of any kind having been employed except the thermometer.

"Now, if the reasoning powers were not duly exerted, experience, would obviously teach as a result of this case that the thermometer is an antiparalytic. The rational therapist is not, however, satisfied with this knowledge of the fact, for, 'fact it is.' He inquires into the mode in which the effect was induced, and he is not long in referring it to the influence exerted by the *moral* over the *physique*; and he classes the thermometer with Perkinism, animal magnetism, and their congenerous arts—amongst articles that act chiefly through the new impressions they make on the senses.

"It might seem to those who are unacquainted with medical history that in periods approaching our own, no such illogical inferences could be deduced, and that it has been the custom with the profession for ages to bestow all due caution and the most rational inquiry in the collection of facts. Such, however, is far from being the case. It is, in-

deed, humiliating to reflect upon the credulity or faulty observation that has existed among nations who have successfully cultivated other branches of natural science.

"* * * They have all been properly rejected from the lists of our medicinal agents, and are looked upon as irrational; yet we are compelled to infer from the fact of their having been received in some countries into official publications—into the pharmacopeias, which emanate from congregations of those of our professions who are esteemed learned by education and by practice—that they were originally admitted under the sanction of fancied experience.

"In the darker periods of medical history, monstrous and revolting polypharmaceutical preparations were introduced, and nothing but the blindest devotion to authority or to established custom could have occasioned their retention.

"* * * Happily, more correct ideas are beginning to be entertained on the subject of true experience. It is now felt—to employ the language of a distinguished surgeon, Professor Liston—that the greatest number of well assorted facts on a particular subject constitutes experience, whether these facts have been culled in five years or in fifty. A better system, too, of observation generally prevails, so that we have discarded the absurd and revolting agents that are still retained in the books of authority of some European countries. Much, however, remains to be done. The catalogue of the *Materia Medica* is yet overstocked, and the pruning knife has still to be applied, to lop off many of the redundancies which have been proved to be such by the more accurate attention that is daily paid to tracing the due relation between cause and effect. 'To purchase a clear and warrantable body of truth,' as Sir Thomas Browne has well observed, 'we must forget and part with much we know.'

"* * * Every one will be compelled to admit that it is the duty of the correct therapist to doubt the existence of qualities in any article until they have been adequately proved. When such is the case, no reasoning can set aside facts; but unless the evidence be overpowering, it is equally his duty to remain in doubt, especially should reflection suggest strong grounds for believing that the number of observations has been insufficient, that they have not been properly made or unsequential."

And finally the eminent historian, Ferrero, in his lecture on the "Corruption in Ancient Rome," says: "Every deed we do in the intimacy of the household reacts on all our surroundings. With our every act we assume a responsibility toward the nation and posterity, the sanction for which, near or far away, is in events. This justifies, at least in part, the ancient conception by which the state had the right to exercise vigilance over its citizens, their private acts, customs, pleasures, vices, caprices. This vigilance, the laws that regulated it, the moral and political teachings that brought pressure to bear in the exercise of these laws, tended above all to charge upon the individual man the social responsibility of his single acts; to remind him that in the things most personal, aside from the individual pain or pleasure, there was an interest, a good or an evil, in common."

My friends, let us apply these words to the government of our medical profession, and carry their lesson to our offices and to the bedsides of our patients; and then the good we do may not only live with us, but may survive us.

ACUTE DILATATION OF THE STOMACH AND DUODENUM.*

By Chas. H. Cargile, M. D., Bentonville.

This title, "Acute Dilatation of the Stomach and Duodenum," is chosen instead of the usual ones, "Acute Gastric Dilatation," "Acute Dilatation of the Stomach," "Postoperative Arterioesenteric Intestinal Obstruction," "Postoperative Ileus," "Postoperative Acute Dilatation of the Stomach," "Acute Duodeno-Jejunal Intestinal Obstruction," "Postoperative Gastric Paralysis," "Duodenal Ileus," "Gastro Mesenteric Ileus," et al., because in nearly all autopsies more or less of the duodenum has been found involved.

The condition varies in degree, the greater curvature having been found all the way from the umbilicus to the pubis, and more or less filling the abdomen transversely as well as vertically.

History.—In 1842 Rokitsky first called attention to this condition. In 1853 Miller and Humby reported a case. Bamberger in 1855 called attention to it as having occurred in an infectious disease. A case was reported by Brinton in 1859. It remained for

Fagge, in 1872, to first accurately describe this malady. During the next two decades not many cases were reported. Laffer, *Annals of Surgery*, March and April, 1908, says: "Albrecht, in 1899, found only nineteen cases, including his own, and Thomson but forty-four in 1902. Neek, in 1905, was able to find sixty cases, while Conner reported 102 at the beginning of 1907." He further says: "I have carefully gone over the American and foreign literature of the subject and have collected 217 cases, including my own."

The paucity of the literature of, as well as the lack of familiarity with, this morbid state is well illustrated by the fact that a professor of surgery in one of the leading schools of this country, who has a world-wide reputation, in November, 1907, confessed that as late as March 1904, he knew so little about it that he failed to take it into consideration in making a diagnosis of a case of postoperative ileus, in which afterward, with more light on the subject, he knew should have been done.

During the last few years several hundred cases have been reported, many of which were autopsied, and much has been written about it.

In this paper an attempt at classification is omitted, because it seems a hopeless undertaking, not one of the many proposed having met with approval. This is not surprising because thorough elucidation of pathology and etiology of any disease must necessarily precede a correct classification.

Early, and indeed until recently, acute dilatation of the stomach and duodenum was in the professional mind almost inseparably associated with, and regarded as a sequelae of, a surgical procedure in the abdomen. As our knowledge and observation enlarge we are learning that it occurs under many non-surgical conditions, including the puerperium, errors in diet, traumatism, infectious diseases, the effects of anesthetics and possibly other medicines. Just in proportion as this fact is established, this subject becomes of importance to the practitioner, and to call attention to it, more than all else, prompted the writing of this paper.

Doubtless most physicians, like the writer, after becoming familiar with the syndrome of this malady, can easily recall having more or less frequently been chagrined by seeing their patients in all stages of various diseases, even in convalescence, suddenly seized

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

with epigastric pain and distension, sometimes extending to the whole abdomen, oft-repeated nonprojectile vomiting of dark green liquid in large quantities, insatiable thirst, restlessness, dyspnea, pale and pinched facies, and rapidly failing heart, ending in death.

Dr. Robert Coleman Kemp, of New York (*American Journal of Surgery*), says: "I am thoroughly convinced that this condition is of quite common occurrence, especially in the milder forms, and may be productive of various clinical symptoms, in some cases chiefly cardiac and respiratory, and in others nervous in character." He further says: "In pneumonia, a sudden cardiac and respiratory increase may be suggestive of further pulmonary involvement while acute dilatation may be responsible for the condition." Mangelsdorf reported many cases of epilepsy and migraine in which he demonstrated acute dilatation of the stomach.

Clinical History.—Acute pain in the epigastrium, extreme thirst, nausea and non-projectile vomiting of large quantities of dark greenish liquid characterize the first stage. All of these grow worse as the disease progresses; the pulse becomes weaker and more frequent; the gastric contents actively fermenting, the stomach, in some cases the stomach and duodenum, become distended with gas and dark green liquid; the epigastrium distended especially toward the left, notwithstanding the lower half of the abdomen may remain flat. This however may give way to the rapidly dilating stomach until the latter more or less fills the abdomen, crowding the small intestines into the pelvis. The abdominal muscles are not rigid as in peritonitis, but stretched, the parietes becoming very attenuated in extreme cases. The upward pressure causes dyspnea and increases the burden of a heart that is rapidly growing weak. The urine rapidly grows less and is sometimes wholly suppressed. Bowels usually constipated; but diarrhea may exist throughout; occasionally it follows constipation; very rarely it is bloody.

The temperature is normal or lower rarely higher.

As shown by the frequent and weak pulse, heart failure is rapidly progressive. Respiration is shallow, hurried and labored in proportion to the dilatation. The patient is restless, with pinched pale facies, ending in death from twenty-four hours to a week or ten days if not relieved.

The etiology is obscure. Many have been the theories, but all more or less fail under scrutiny.

Diseases and injuries of the spine, various infections and poisons, auto and medicinal, including anesthetics, sustain a causative relation to this disease, by acting on the brain and spinal centers. The former through the vagi, and the latter by its inhibitory action through the solar plexus. While it follows traumatism and operations on all parts of the body it seems to have a predilection for those in the abdomen, especially on the biliary tract and more especially the common duct. So many autopsies have revealed the duodenum dilated to the point at which it is crossed by the superior mesenteric artery, and by which it is plainly compressed or constricted that many investigators give it first place among etiological factors. So frequent is this, that it is by many designated as acute gastro-mesenteric ileus. The traction on the artery is frequently due to previously existing enteroptosis, as in the appended synopsis of a case, which in turn is aggravated by the dilated stomach crowding the intestines into the pelvis and thus further increasing the traction on the mesenteric artery, which increases the dilatation, thus constituting a vicious circle. By direct and backward compression of the duodenum against the vertebrae behind by the dilated stomach in front, the obstruction is further increased.

Once the stomach is dilated from whatever cause there may follow a kink of the duodenum near the pylorus, thus increasing the obstruction. Likewise dilated stomachs have sometimes caused a kink in the esophagus, by reason of the location of the cardia preventing vomiting, and thwarting attempts at lavage. In a few cases the cardiac orifice has been found obstructed by a semi-lunar fold.

To spasm or stricture of the pylorus, some have attributed a causative relation.

In point of frequency as a causative factor general anesthetics may be rated second to traction of the mesenteric artery.

The writer in his research does not recall a case of gastric dilatation following an operation performed under spinal or local anesthesia. It is here suggested that this point be kept in mind and reported on. As between chloroform and ether, the question seems to be unsettled.

Prognosis.—Formerly death was the rule, but now with the improved methods of treat-

ment, the mortality varies from 25 to 50 per cent according to various statistics.

Treatment.—The main object in the treatment is to empty the stomach and irrigate it freely with salt solution, repeating frequently in grave cases, especially if the recurring vomiting and dilatation continue. The fact that the stomach is capable of secreting one or two quarts of liquid and generating much gas in a short while should be kept in mind by the attendants and lavage resorted to as frequently as indicated. All food and drink should be withheld; the same injunction as regards medicine can be but slightly modified, especially in critical cases. Enemas of glycerine and salts to secure movement of bowels, and rectal alimentation should be resorted to. Salt solution by proctoclysis and hypodermoclysis are much to be relied on. Strychnine hypodermically according to circumstances. Morphine hypodermically is rarely indicated. Eserin by stimulating peristalsis is claimed to be helpful. Elevating the hips has proved beneficial, likewise lying on the abdomen and the knee-chest posture. Gastroenterostomy has sometimes proved curative, after failure of the conservative methods.

The following case is of interest from an etiological standpoint. Miss R.———, age 19. A great sufferer from dysmenorrhoea. In shortening the round ligaments, by a modification of Gilliam's operation, the small intestines cecum and appendix were found in the midline in the pelvis lying on a retroverted and adherent uterus. The abdomen was not explored to determine whether or not other ptoses existed, because it could not be done through the incision, which has been promised should be made as small as possible.

The case progressed without incident until the third day, when frequent pulse, epigastric pain, much vomiting of dark greenish liquid and constipation began. The epigastrium and left hypochondrium became distinctly prominent and tender, though the rest of the abdomen seemed normal. The pulse grew more frequent, the temperature slightly above normal, breathing shallow and hurried. Notwithstanding this syndrome that should have been easily and properly interpreted the diagnosis was not promptly made; in the meanwhile all of the symptoms increased very much and the condition became alarming. The panting respiration, cool extremities, the anxious, pale facies, frequent, weak pulse, restlessness and almost total sup-

pression of urine justified a very grave prognosis. Lavage was resorted to with good result, as far as the gastric dilatation was concerned. A severe and offensive diarrhea, the discharges containing some blood, succeeded the former constipation. Toxemia was very marked, and notwithstanding the cessation of the dilatation the prognosis was even graver. Salt solution by hypodermoclysis in full doses repeated for several days, with increased doses of strychnine, supplemented a little later by whisky and carefully selected food, proved effectual in rescuing the patient from what looked like impending death. Convalescence though protracted was perfect.

DISCUSSION.

Dr. Dunaway: This is a subject in which I am very much interested. Seeing that Dr. King is not present, I feel as though I would like to say a word. Some five years ago, I began to study the subject upon the cadaver. The more I studied it, the more I became convinced that gastro-duodenal dilatation was a pathological condition very seldom recognized by the average surgeon and physician. After that time I began reading a series of articles by Byron Robinson, of Chicago, and his particular method and ability in dealing with this subject pathologically and physiologically still further convinced me that there was a subject about which I had always been ignorant. The cadaver work that I did consisted in attempting to pass water through the stomach and through the dilated portion of the duodenum into the jejunum. I found the obstruction in nearly every case to be at the crossing, as described in the doctor's paper. That led me to never fail to observe that condition of the stomach and duodenum in every case of laparotomy. My experience there led me to observe that it existed a great many times, relatively speaking. And, taking up the thread of thought as I studied the condition, I have come to the conclusion that acute gastro-duodenal dilatation cannot exist or cannot be produced; but that it is a chronic condition, or a condition existing in a degree preceding a laparotomy, or any surgical procedure, as for that matter.

I believe it is an anatomical physiological condition. In other words, it is, in a manner, that is interfered with by one's own physiology. It is progressive. The degree of dilatation may be small. The after-effects of an acute dilatation, such as vomiting and the symptoms related in the doctor's paper, of course will be correspondingly small. If

there is considerable dilatation, you will have the malignant cases of vomiting referred to by the doctor, and that every surgeon in this house has seen, and has been made sick at heart to see the patient turned over and this dark fluid just pour out of the mouth, just simply pouring out; a dark greenish fluid.

Dr. Dibrell: Dr. Cargile mentioned the fact that there had not been any case reported of acute dilatation of the stomach after an operation under local anesthesia. I had a case a year or so ago, in which I had an acute dilatation of the stomach, for some forty-eight hours before I could relieve the symptoms. I didn't have any doubt as to what was the matter, but after a great many unsuccessful efforts to relieve the tension by high enemas, I used a stomach tube, and relieved the condition.

Dr. Runyan: Very little was said about the treatment in these cases. I want to emphasize and impress you with something about that. I want to say that the best treatment is the prophylactic treatment. It may be, as Dr. Dunaway said, that these cases are anatomical. The cases are going to occur, no matter what you do or what you don't do. But, in doing surgery, I have found that if I have my cases well prepared and if I institute the treatment that I am now carrying out with all my cases, I don't have this acute dilatation of the stomach any more. I believe it is not anatomical, so much as it is proper treatment. In other words, I believe we must have a prophylactic treatment, and that treatment is this: prepare your patient well before operation, so that you don't have any constipation, keep the bowels perfectly well cleaned out, see the patient's stomach is emptied before operation and keep the stomach empty for at least twenty-four hours after every abdominal section. Don't let them have a sip of water even. Keep the stomach absolutely empty. And, in addition to that I believe that it is due sometimes to vaso-motor paresis. That's my idea of the dilatation more than anything else. Prevent shock just as far as possible. Prevent shock, in other words, after your operation, or during operation. One of the best remedies we have for the prevention of this shock is 1-8 gr. of morphine and 1-150 gr. of atropine at least half an hour before these operations, together with 1-30 gr. strychnin, and then 1-30 gr. of strychnin hypodermically every three hours for at least three days after the operation. If that is done, you will see very few cases of acute dilatation of the stomach. Then, if you do have acute dilatation of the stomach with these symptoms that we have just heard described by the essayist there is nothing equal to the stomach tube, as Dr. Cargile has

said, used as frequently as it may become necessary. There is no special time, but simply use it as frequently as you have distension, and fluid accumulating in the stomach, but don't forget to keep up your strychnin hypodermically at least every three hours, 1-30 grain.

Dr. Cargile: With reference to what Dr. Dibrell said, I said that in my research I did not recall a case in which this condition had followed local or spinal anesthesia. I did not say that I had that in my mind in all my research. I would like to ask him whether or not his case was reported. If not, of course, I could not have known of it.

Dr. Dibrell: No. It was not reported.

Dr. Cargile: So I am excused for not knowing of that case. I agree perfectly with Dr. Runyan as to what he says about the prophylactic treatment. But if, as I believe, this condition is many times due to traction on the gastro-mesenteric artery, which in turn is due to a previously existing enteroposis in my case as is my opinion, I doubt that this prophylactic treatment would prevent the condition.

Dr. Runyan: Do you see many of these cases not following operation, but before operation?

Dr. Cargile: After studying it, as I said here, doubtless most of us doctors can recall them. It is quite a familiar scene to me, reaching back all through my professional life, and I believe I have lost a number of cases coming on in various diseases not surgical. All of us have had our patients when we thought they were getting well, suddenly begin to vomit and have all the symptoms that belong to this condition and die. I recall one case in which I was called in consultation with a physician in the case of his brother-in-law for typhoid fever. We thought it was extreme duodenal tympanitis. I did not know the symptoms then. A few years ago, before I knew anything of the condition, I operated upon a very healthy young lady for chronic appendicitis, and she died with all the symptoms, as I know, of this condition. I believe it was due to the inflammation caused by this acute dilatation.

Dr. Dunaway: In this condition of dilatation following, for instance, a case of pleurisy or pneumonia, I notice the literature speaks little of it. Have you any special idea regarding that?

Dr. Cargile: Since I have become familiar with this literature and studied the question, I haven't had any. I have had just the one case I reported. I have heard a good many physicians get up and say they have seen their patients die that way, and didn't know what was the matter.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust Building.

Editorials.

As the politicians are now announcing for the coming primaries, it is the duty of the medical profession to awaken and take an interest in the personnel of the next legislature.

If we wish to help in the upbuilding of our state, as well as in the health and happiness of our people, we will have to take more interest in the representatives we send to our legislature.

It is not enough to get a promise from a candidate that he will support a measure that we want, but we should show him where it will benefit his county and his neighbors, convince him of its merits, and he will not only vote for it, but will do much in educating the people.

Our failure in the past has been due to the fact that we ask our legislature to pass a bill that they know next to nothing about, and when questioned by the opposition they are unable to go into the merits of it, and we lose; the opposition have succeeded in convincing the people that the doctor should be looked upon with suspicion when he favors any legislative enactment.

This we have to overcome by teaching the people, and how better can we do this than by

getting the prospective candidate interested and have him discuss it in his campaign?

We want a State Board of Health with a sufficient amount of money appropriated with which to do something.

A few years ago the militia was strung along the borders of our state in order to keep out yellow fever, and the people were panic-stricken, yet more people die in Arkansas every year from malaria than died in that epidemic.

More people die in the United States every year from malaria than have died within her borders from yellow fever in the past quarter of a century.

Yet malaria is a preventable disease, and we are doing nothing to eliminate it. From a monetary standpoint, it would be much cheaper for the state to eradicate it than to allow it to go on unmolested.

Statistics compiled from the last census show that 14,909 persons died in the United States in 1900 from malaria. These same statistics place Arkansas with a higher number of deaths than any other state in the Union—1,730, nearly 12 per cent of the whole. If these figures are correct, and estimating the value of human life at \$3,000.00 (the legal estimate is \$5,000.00), the cost to our people in the loss of life alone in that year was \$5,190,000.00. Think of it! Enough to drain every pond and slash in the state, and then have money left to run the State Board of Health for twenty-five years!

Malaria is a disease with a very small death rate—possibly 1 in 300. Then look at the time lost from the earning capacity of those who are affected. We will say nothing of the cost of medicine and our fees.

The saving to the people of our state who typhoid fever this year would be sufficient have been unfortunate enough to have had to pay the expense of a competent board of health for the next twenty years.

The state is now taking active measures to care for those infected with tuberculosis, and will start a campaign of education along the lines of prevention. But this is more the result of an international wave that is sweep-wants are purely local, in order to get them the great white plague. While our greatest ing over the civilized world, trying to destroy we will have to arouse public sentiment in their favor; and if every doctor in the state will appoint himself a committee of one to start a campaign of education among his patrons, we are sure at the next meeting of the legislature we can get all we ask for.

IPECAC IN AMEBIC DYSENTERY.

Dr. Wm. Allen, Charlotte, N. C., says:

During the past eighteen months we have been called on to treat thirty-six cases of amebiasis. In view of the strong recommendation given ipecac by Manson we determined to use it in conjunction with the other procedures for the treatment for this variety of dysentery.

It has been exhibited in eight of our cases. Six of these were placed in hospitals under strict supervision. One was placed in bed at home and one—a physician—remained at work. The first seven cases were placed in bed for twelve days, with liquid diet for the first half of the time and light diet for the second half. All were given one daily colonic irrigation of not less than one gallon of normal salt or quinin 1 to 5000. From 10 to 60 grains of ipecac were given mixed with equal parts of mutton suet in capsules, in lemon juice one hour after meals. Mutton suet is insoluble in acid. Stomach acidity should be highest an hour after eating, but to be safe lemon juice was added. In only one case was the nausea sufficient to cause discontinuance of the drug.

In seven cases an average of gr. 30 of ipecac was given daily for twelve days and in several cases 5 and 10-grain doses for several weeks following.

In the first case the eruption of pellagra appeared after the first week and there was no benefit derived from the treatment. In the ambulant case the number of stools was reduced by one half. The remaining five cases ran about the same course. After the second or third day there was no bowel movement except following the irrigation. In the cases receiving the ipecac gr. 60, after five to eight days the drug began to irritate the intestinal tract so that the size of the dose had to be reduced.

In none of these cases had diarrhea recurred since treatment (a period of six months), but at the same time there has been no increase in weight and only a moderate increase in hemoglobin. We believe that all of these people are still carrying amebae and that they will undoubtedly have a recurrence of dysentery.

We find that rest in bed with suitable diet and colonic irrigations with any harmless liquid for eight to ten days will check the symptom diarrhea for from three to eighteen

months. And we are further unable to see that ipecac has been of the slightest advantage in this very limited number of cases. Probably the efficacy of ipecac can be treated only by using it in the absence of any other form of treatment whatever.

APPEAL

TO THE MEDICAL PROFESSION OF THE WEST
AND SOUTH.

Up to the present time there has not been a concerted effort to collect and preserve historical data in regard to the origin, evolution and personnel of our profession in this part of our country. The result of this delinquency has been the total loss of much material that should have been preserved, especially pertaining to medical schools and societies, and biographical matter in connection with the practitioners and teachers of medicine of by-gone days. A good deal of material of this character is still obtainable if a systematic effort is made to locate and preserve it. It is in the possession of individuals, families and private libraries and will eventually be lost. The Western Association for the Preservation of Medical Records was organized in May, 1909, for the purpose of collecting the historical and biographical records of the profession of the West and South. We wish to preserve anything and everything pertaining to Western medicine and medical men and are anxious to enlist the active help and support of every member of the profession who is in sympathy with our aims. We want every one to become associated and identified with the work of our Association. There are no fees or obligations of any kind. We have made arrangements with the Lloyd Library, Cincinnati, O., for the proper housing of the material collected. The latter will be systematically arranged, catalogued and properly preserved so that it can be made available for research-work. We are particularly anxious to obtain:

1. Medical journals published in the West and South prior to 1880;
2. Medical books and pamphlets written or published in the West;
3. Manuscripts and autographs of early physicians;
4. Old diplomas and other documents of a medical character;
5. Proceedings of medical societies;

6. Reports of hospitals and other medical institutions;

7. Catalogues and Announcements of Western and Southern medical colleges of all "schools";

8. Biographies and portraits of Western physicians;

9. Information and material of any kind pertaining to medicine and medical men and affairs in the West and South;

10. Curios of a medico-historical character.

All contributions should be sent in care of of the Librarian. In view of the fact that we are performing a labor of love and have no funds, our friends and associates will readily understand why all contributions sent by express or freight should be prepaid, so that no expense may accrue to the Association. The necessary expenses of the Association are at present being met by voluntary contributions of its organizers.

May we not count upon *your* active help and support? We would like to hear from every member of the profession who is interested in the proposed work.

C. A. L. Reed, M. D., Chairman,

Otto Juettner, M. D., Secretary.

A. G. Drury, M. D., Librarian,
710 W. Eighth St.,
Cincinnati, O.

CENSUS COMMISSION REPORT.

PRELIMINARY BULLETIN SOON TO BE ISSUED
BY THE MEMBERS.

Washington, D. C., October 15, 1909.—The preliminary report of the Census Commission relative to the second decennial revision of the Classification of the Causes of Death, made by the International Commission in Paris recently, together with the revised list of titles will be found in Census Bulletin No. 104 which will be published soon and copies will be sent to all of the registration officials of the United States and to the members of the American Statistical Association. A new manual of classification will be prepared for the use of the registration offices of the United States as soon as the detailed results of the revision are available, and an effort will be made to bring the revised classification to the attention of every physician and local registrar in the country as an aid to the proper reporting of causes of death.

If the Census Commission had accomplished absolutely nothing in the way of practical

reform, it would have been, according to Census Chief Statistician Wilbur, well worth sending in order that the country should occupy the place to which it is entitled in the councils of the nations which employ this classification; but, as a matter of fact, very much was accomplished.

Doctor F. P. Foster, as chairman of the American Medical Association's committee and Doctor Wilmer R. Batt, as chairman of the committee of the American Public Health Association, have been engaged for over a year in coöperation with the Bureau of the Census and with committees appointed by many national medical organizations devoted to special branches of medicine, upon the question of the proper classification and nomenclature of diseases with special reference to the improvements to be made in the International Classification at the recent revision. Meetings were held by these committees at Philadelphia, New York, and Washington, and important suggestions were formulated which were duly transmitted to the Secretary-General, Doctor Bertillon, and were laid before the Commission in the special book prepared for its use. A very considerable proportion of these were adopted by the International Commission. Perhaps the most important of all the measures especially recommended by the United States was the improvement in the principle of the statistical classification of deaths from violence. Doctor Bertillon, Doctor Levi, of Italy, and Dr. Cressy L. Wilbur were appointed a special committee of the commission to adjust this portion of the classification, which they did.

Dr. Wilbur stated today that he believed the revised list will be much more acceptable to American registrars and that it will give the information in regard to the industrial causes of mortality in a more satisfactory way than any classification previously prepared. Of course all of the recommendations of the American delegates could not be adopted. There were twenty-three countries represented in the International Commission and conservatism is a characteristic of European officials and especially of European statisticians. It is perfectly right, he declared, that this should be so because it creates endless confusion when many changes are made in an established system of compilation. Furthermore, it is hardly to be expected that a country like the United States, whose registration officials had never before joined in an inter-

national congress and whose statistics relate to only about one-half of the population of the United States, should be able to prevail against the established views of the representatives of countries where complete and comprehensive vital statistics have been published for a long series of years. Nevertheless the fullest consideration was given to the American propositions and the utmost courtesy and harmony prevailed. He feels that the American delegates owe profound thanks to the Secretary-General, Doctor Bertillion, and to the French Government, and that American registrars should loyally abide by the recommendations adopted, and use the International Classification without any modifications or changes, except such as are entirely permissible under its constitution, for the next ten years.

Dr. Wilbur stated that the United States starts at the beginning of a new census decade with the revised classification of causes of death, in which American registration officials and American physicians have had their say; a revised standard certificate of death, which will be adopted by the American Public Health Association at Richmond this month, and put into effect for all of the registration areas beginning January 1, 1910; and with new rules and instructions recently formulated by the Director of the Census and promulgated to all reporting offices for the purpose of obtaining more complete and correct transcripts of the deaths now registered.

News Items.

The Third District Medical Society will meet at Lonoke, November 11 and 12. Dr. S. A. Southall, of Lonoke, president, and H. H. Rightor, of Helena, secretary.

The Medical Department of the State University opened September 30 and the Physicians and Surgeons on October 1. Both schools have large classes, and the prospects are good for a very successful year.

The Board of Trustees of the State Tuberculosis Sanatorium, after looking over all the proposed sites that were feasible, accepted the one offered by the citizens of Booneville, Logan County, on condition that they are able to furnish a good water supply.

The site as selected for the sanatorium is an ideal one—on a mountain side, 800 to 900

feet above sea level—with a nice southern slope into a beautiful valley, containing two or three hundred acres of tillable land.

The president of the American Gynecological Society has appointed a committee to report at the next annual meeting in Washington, on the Present Status of Obstetrical Teaching in Europe and America, and to recommend improvements in the scope and character of the teaching of obstetrics in America.

The committee consists of the professors of obstetrics in Columbia University, University of Pennsylvania, Harvard, Jefferson Medical College, Johns Hopkins University, Cornell University and the University of Chicago.

Communications from anyone interested in the subject will be gladly received by the chairman of the committee, Dr. B. C. Hirst, 1821 Spruce street, Philadelphia, Pa.

New Members.

Dr. E. A. Callahan, Carlisle, Lonoke Co.

Dr. J. W. Elders, Alicia, Lawrence County.

Dr. O. T. Ward, Wolf Bayou, Independence County.

Personals.

Dr. C. C. Gray has moved from Sharp to Cave City.

Dr. R. W. Lindsey is spending a month in New York.

Dr. J. H. Kennerly, of Batesville, has returned from a visit to Seattle.

Dr. W. C. Dunaway has returned from a several week's trip to Chicago and Rochester, Minn.

Dr. R. J. Steele, of Morrillton, was in the city on the 12th.

Dr. H. P. Ruth, of Hartford, attended the banquet given by the State Agents of the Equitable Life to their local agents, Oct. 5.

Dr. R. W. Donnell has moved from Malvern to Muskogee, Oklahoma.

Dr. I. N. Love, of Dardanelle, and Dr. W. F. Smith, of Clarksville, spent Sept. 20. in the city.

Dr. C. R. Shinault left on Sept. 20, for a six weeks' trip to Philadelphia, New York and Rochester, Minn.

Dr. J. W. Walton, of Benton, spent several days in the city during the latter part of September.

Dr. G. E. Cannon is preparing to move from Magnolia to Louisiana, where he will have charge of the Medical Department of a large milling company.

Dr. A. G. Harrison, of Kensett, was in the city Sept. 27.

Dr. G. A. Hebert, of Hot Springs, has been appointed by President Lenow as the representative of the Arkansas Medical Society to the National Legislative Council of the American Medical Association.

Dr. J. H. Martindale, formerly of Hope, is now located in this city with offices at Fifth and Main.

Dr. E. R. Dibrell has spent the past three weeks in Philadelphia and New York.

Dr. John H. Baehr, of Philadelphia, arrived Sept. 3, and will have charge of the laboratories at the Medical Dept. of the State University.

Dr. T. E. Hodges who was operated on for gall stones a few days ago at the P. & S. Hospital has almost entirely recovered.

Dr. R. D. Schimmelpfennig, who was formerly a Little Rock boy, has been elected house physician to the New Orleans Sanitarium at New Orleans.

Dr. G. W. Blakely, wife and son, of Gleason, are convalescing from a long siege of Typhoid Fever, and feel very grateful to Dr. Geo. S. Brown, of Conway, for his kindness during their protracted illness.

Dr. E. Meek, of this city, had the misfortune to get a fall Oct. 8, which resulted in the dislocation of his right shoulder.

Dr. R. C. Dorr, of Batesville, spent a couple of days in the city last week.

Dr. E. N. Allen, of South McAlester, Okla., chief surgeon of the Rock Island, spent the past ten days in the city.

District and County Societies.

TENTH COUNCILOR DISTRICT.—The Tenth Councilor District of the Ark. Med. Society met in regular semi-annual session at Siloam Springs, in the Chautauqua Building, Sept. 21st, under the presidency of Dr. F. B. Young, of Springdale.

The attendance was large and the scientific program was one of the best the society has ever had. The meeting lasted from 9 a. m. until 7 p. m.

Under the auspices of the Benton County Med. Society a magnificent banquet was given in honor of the members of the Tenth Councilor District. A number of ladies graced the festive board.

Following is the Scientific Program:

Dr. F. B. Young, Springdale, Ark., Presidential Address, "Notes On Evolution of the Human Race."

Dr. H. D. Wood, Fayetteville, Ark., Open Discussion on Presidential Address.

Dr. W. T. Reynolds, Kansas City, Mo., Renal Tuberculosis.

Dr. W. M. Stevens, Kansas City, Mo., Anesthesia in Children.

Dr. D. C. Summers, Elm Springs, Ark., Prevention of Contagious and Infectious Diseases.

Dr. Logan Clendening, Kansas City, Mo., Diagnosis of Gastric Ulcer.

Dr. J. G. Omelyena, Midland, Ark., Cystitis—Diagnosis and Treatment.

Dr. Chas. H. Cargile, Bentonville, Ark., Surgical Treatment of Indigestion.

Dr. J. Z. Sexton, Siloam Springs, Ark., Rupture of Uterus—Report of Case.

Dr. H. E. Thomason, Siloam Springs, Ark., Present Clinic.

The next meeting will be held in Fort Smith the third Tuesday in next March.

L. R. DORENTE, *Secretary*.

JEFFERSON COUNTY.—The Jefferson Co. Medical Society met in regular session at the office of Dr. M. S. Stewart. The President and Vice President being absent, house was called to order by the Secretary and Dr. C. E. Wright, of Altheimer, was elected chairman pro tem. Members present: Drs. Blankenship, Williams, Jordan, Breathwitt, Luck, Shelton, Stewart, Clark, Crutcher, Wright, Lowe, Hawkinson and Woodul. Minutes of last meeting read and approved. The resolution presented at last meeting to amend the constitution was left over for thirty days longer on account of Secretary failing to state in notices sent out that this would be voted upon. Resolutions pertaining to insurance examinations was likewise carried over till next meeting for same reason.

The vote by which Dr. A. G. Blackwell was expelled some time ago was reconsidered and

the question of the legality of reinstating him before the end of one year from time of expulsion referred to Board of Censors. The Finance Committee made the following report. Amount total collected from the members of Jefferson Co. Med. Society to entertain State society \$701.00. Amount on hand after paying all expenses of State meeting \$75.99. Report accepted, committees thanked and discharged.

Dr. Luck's paper was held over till meeting in November.

After thirty minutes spent in social meeting, society adjourned.

W. T. LOWE, *Secy. and Treas.*

PHILLIPS COUNTY.—The Phillips County Medical Society resumed its work, after a two month's vacation, October 5, 1909. President Bean in the chair. A large majority of the members were present, also one of Phillips County's old members, now of Pulaski., Dr. Chas. R. Shinault. After the business was over a social session was very much enjoyed by all those fortunate enough to be on hand.

Our society has two social sessions yearly. We find them very beneficial as well as very pleasant and heartily recommend them to other county societies. The laying aside of professional cares for a short time and mingling around a common table to eat, drink and be merry, brings us all closer together; promotes good fellowship and fraternal feelings.

HENRY H. RIGHTOR, *Secretary.*

FRANKLIN CO.—On account of a mistake of the secretary this society held its regular meeting on Tuesday, October 5, and a second meeting on the next day. Dr. Rambo, the president, presided at the first meeting and Drs. Turner, Blackburn, Wigley and Douglass were present. Dr. Wigley was a welcome visitor from Mulberry. At the second meeting were present: Drs. Warren, Crocker, Turner, Blackburn and Douglass. Dr. Blackburn presided. Both meetings were interesting and profitable. Dr. Wigley reported an interesting case of Bright's Disease. A case of dystocia was reported and discussed. Patient was in labor thirty hours. The following factors contributed to the delay; a contracted pelvis; primipara; dry labor,

membranes being ruptured in the beginning; a breach presentation; and a large child. The delay was wholly in the delivery of the body; the head quickly followed. The child was dead. The mother's condition was good. She was not greatly exhausted.

Next meeting will be held at Ozark, November 2d.

THOS. DOUGLASS, *Secretary.*

INDEPENDENCE COUNTY.—The Independence County Medical Society met in Batesville on Monday night, October 11, at 7:30 p. m. The house was called to order by President C. G. Hinkle. Interesting papers were read and discussed, as follows: C. G. Hinkle, Carbolic Acid Poisoning; J. H. Kennedy, Hookworm Disease; R. C. Dorr, Congenital Pyloric Stenosis. The next meeting will be held the second Monday night in January.

O. J. T. JOHNSTON, *Secretary.*

WASHINGTON COUNTY.—The Washington County Medical Society has not been so nearly dead, nor sleeping, as silence on our part might lead one to believe. It has been holding interesting and instructive monthly meetings throughout the year, the adjourned sessions being held at Springdale and Prairie Grove, the regular (quarterly) sessions always at Fayetteville.

At the quarterly meeting in October, however, the Society thought best to go into winter quarters till the regular meeting at Fayetteville in January, as the members believed that the monthly meetings detracted from the attendance at the regular meetings.

By request of members of the Society, Dr. Wilfred Lenton, state veterinarian, of the University of Arkansas, read before the Society a paper on "Control Work in Tuberculosis, with Special Reference to Bovine Tuberculosis." The Society appreciated this favor very highly, and voted Dr. Lenton the thanks of the Society. A motion of Dr. A. S. Gregg, to have the secretary send a copy of this paper, by consent of Dr. Lenton, to the Journal of the Arkansas Medical Society for publication carried, and in the near future the secretary expects to send a copy to the editor for publication at his discretion.

American Proctologic Society

Eleventh Annual Meeting, held at Atlantic City, N. J., June 7 and 8, 1909.

The President, Dr. George B. Evans, of Dayton, Ohio, in the chair.

Officers elected for the ensuing year: President, Dwight H. Murray, M. D., Syracuse, N. Y.; vice president, T. Chittenden Hill, M. D., Boston, Mass.; secretary-treasurer, Lewis H. Adler, Jr., M. D., Philadelphia, Pa.; Executive Council, George B. Evans, M. D., Dayton, Ohio, chairman; Dwight H. Murray, M. D., Syracuse, N. Y.; Louis J. Hirschman, M. D., Detroit, Mich.; Lewis H. Adler, Jr., M. D., Philadelphia, Pa.

The place of meeting for 1910 is St. Louis, Mo. Headquarters, Planters' Hotel, June 6 and 7, 1910.

The following were elected fellows of the Society: Dr. Charles S. Gilman, 419 Boylston Street, Boston, Mass.; Dr. Donley C. Hawley, Burlington, Vt., and Dr. Frank C. Yeomans, 19 East Forty-fifth Street, New York City, N. Y.

The following is an abstract of the principal papers read:

PRESIDENT'S ADDRESS, "PROGRESS IN PROCTOLOGY."

The president, George B. Evans, A. M., M. D., Dayton, Ohio.

Who stated that not many years since, the creation of proctology as a specialty was frowned upon; for an indefinite period what was known of and what was done for diseases of the rectum was largely empiric, and not due to special knowledge or scientific study.

A few of us, at least, can remember when it was the rule among general practitioners to make no special effort to determine the pathology of diseases of the rectum; in fact, it was believed unbecoming the dignity of a high-classed, high-toned medical gentleman to so lightly esteem modesty as to ask for the privilege of seeking the naked truth. Without attempting to make a diagnosis, opium and lead wash, with catharsis, was deemed a sufficient treatment for any case. Little was taught in medical colleges of these diseases, for little was known and no special desire to learn much concerning them seemed to exist. But, fortunately, in the natural evolution of this specialty, this ignorance and indifference, in the main, has been eliminated, and this field of work has assumed that of an accredited and justifiable specialty. No longer do we have to contend with the nonrecognition of serious pathology, because of interposed modesty, ignorance and criminal indifference. A knowledge of the importance of being able to diagnose and treat intelligently diseases of the rectum is now considered essential for every general practitioner, and all this as a result of the creation of proctology by men who have made special effort to develop this field of work. The credit is due to such men as Adler, Allingham, Ball, Gripps, Edwards, Earle, Gant, Martin, Pennington, Kelsey, Matthews and others. To them are we indebted for progressive proctology.

As a matter of course, our pathology of this area is of necessity a modern pathology, and our knowledge of valves, varicosities, neoplasms, ulcerations and suppurations are not based on hypothetical ideas of a quarter of a century since, but, instead, on the

rather exact revelations of laboratory findings. The import of the presence of staphylococci, gonococci, colon bacilli and tubercle bacilli, is of equally as much importance to the rectal surgeon as is the microscopical proof of the malignancy or benignity of a bit of tissue. With what greater assurance the proctologist approaches examinations of rectal diseases than did the physician of some years since. With a wide-open field, if necessary, the aid of anesthesia, the proctoscope and the laboratory, there is usually not much difficulty in making a diagnosis—a diagnosis inseparably linked with its dependants—treatment and prognosis. Under the influence of progressive proctologic work, ignorance and indifference to the recognition and treatment of rectal diseases is rapidly disappearing from the average medical man, as well as from the average layman. As a result of which the sum total of human suffering is immeasurably lessened, and individual existence is not so frequently abridged. The victims of rectal diseases are to be congratulated that this branch of science, or pseudoscience, has sufficiently advanced, that it now occupies the serious attention of the most progressive and intelligent men. The Lister methods of that day have been so changed and improved that they now seem very crude. The value of thorough cleanliness, asepsis, and the antiseptic influence of certain drugs is of immeasurable value. It is now understood that the recto-anal area can be placed in a surgically clean condition, and that there need be no fear following operative interference. In not a few instances, it obtains that relief is dependent on rectal surgery, when the subjects are unfit for narcosis produced from a general anesthetic, in cases of cardiac, pulmonary or nephritic disease, making it hazardous to use general anesthesia. Sometimes it would seem that this danger of the uses of an anesthetic is too lightly thought of, and, consequently, the mortality rate is increased. Local anesthesia, under cocaine infiltration, for the most part, is satisfactory, and is a great convenience to the operator and a life-saving narcosis in many instances.

The palliative treatment of hemorrhoids by proctologists is largely a matter of enforcement, namely, where they are not permitted the opportunity to relieve by radical methods. The operative methods of removing hemorrhoids are so well understood, simple and effective, that it is foolish to attempt to relieve them by drugs or palliative measures.

The Allingham, or ligature method, when correctly and carefully performed, is generally applicable, but is not so free from pain and so quickly convalesced from as the clamp and cautery method. Many regard the last mentioned method as the one to be preferred. I believe, however, that the enucleation method approaches nearest to the ideal in results, and that the retention of the plug is not so painful as some would have us believe.

Proctoscopic examination is of importance, and is a distinct advance in rectal work. It is of great assistance in determining disease beyond discovery by ordinary methods. It is of distinct service in diagnosis, and of great value in aiding treatment in not a few conditions.

There is more hope for the ultimate cure of tubercular conditions; our better understanding of what environment means to these people will go far toward helping them to recovery, and there is not so much reason for a delayed recognition of the condition, which is of paramount importance.

I believe there is possibly a better understanding of syphilitic conditions, ulcerations, infiltrations and strictures, but the eternal dependence on anti-syphilitic treatment to resolve hyperplastic tissue is not so conspicuous, and progressive workers in this field realize that incision and excision are often necessary.

Concerning malignant and benign growths, the surgical rules that apply in other anatomical regions

apply here. Early discovery and early removal is the only hope, as we all know, in malignant conditions, and, as an advance, the removal of cancerous growths not within easy reach from below may be dealt with from above, or suprapubically, and just here it may not be inopportune to remark that it is to be believed that ere long it will be realized by the average physician that the removal of the rectum *per se* is not as disastrous a matter as it is sometimes made to appear, especially since it is known that muscular transplantation will preserve more or less perfectly the function of the sphincters. The development of the technic essential to produce sphincteric power will relieve rectal extirpation of one of its most unpleasant features and render less hesitant many sufferers who should have the benefit of the operation.

Another matter of progressive interest is that colonic or rectal ptosis is amenable to intra-pelvic or intra-abdominal fixation, bringing relief that in some instances cannot be hoped for by any other method of interference.

After all, the most encouraging sign is that the profession recognizes the fact that proctologists have a legitimate right to exist as specialists, and that diseases in the ano-rectal region deserve the same consideration as elsewhere. With the elimination of indifference, estheticism, modesty, the more universal belief in the necessity of early examination and diagnosis, we can but hope for greater progress and more relief to suffering humanity.

Gentlemen, when I consider the personnel of this Association, I am quite confident of the perpetuity of proctology as a distinct entity, and I am equally sure the progression in this special field of work will be in keeping with that in other specialties.

"A REVIEW OF PROCTOLOGIC LITERATURE FROM MAY, 1908, TO MAY, 1909."

By Samuel T. Earle, M. D., Baltimore, Md.

Among the interesting conditions referred to in the review of the author were the following: "Congenital Idiopathic Dilatation of the Colon" (Hirschsprung's Disease). In Dr. Finley's report of his case he reviewed the literature of the subject to January 1, 1908, and collected some two hundred and six cases, after which he stated that while to Hirschsprung belongs the credit of having first called attention to this disease, a number of cases had been found in the literature antedating his classical description. In the article Dr. Finley discussed the various hypotheses as to the etiology of the disease and some ten theories, which have been suggested from time to time, as the causation of the malady, including that of hypernutrition, which was the author's principal theory. His conclusions as to the etiology of the disease were that no one theory explained every case; that each one explains some.

The symptomatology was described and a complete clinical picture of the disease given with a list of a series of cases discussed in the Johns Hopkins Hospital—eleven in all. Regarding the treatment, the author concludes that no one plan seems applicable to all cases and suggests the method employed in his own case as perhaps the one most applicable to the large proportion of cases, to-wit, a preliminary enterostomy; then a colo-colostomy some months subsequently; finally a complete excision of the affected portion. This artificial anus is left open until after the success of the proceeding steps are assured, when it should be closed under cocaine anesthesia.

Dr. Earle in his report alluded to another case of "Idiopathic Dilatation of the Rectum and Colon as Far as the Hepatic Flexure," which was reported by

H. Morely Fletcher, M. D., and H. Betham Robinson, M. S. (Clinical Society's Transactions, Vol. XL, p. 80).

Another case of interest reported was that of a "Sarcoma of the Rectum in a Boy," aged ten years, by Cecil Rountree (Proceedings Royal Society of Medicine, February, 1908). The pathological examination showed the tumor to be a mixed cell sarcoma. Of five hundred and ninety-six cases analyzed in the Cancer Research Laboratory, of the Middlesex Hospital Reports, there were only six cases under thirty years of age—the age of the youngest, a boy of sixteen years, who had a sarcoma of the rectum. There are likely to be many metastasis in sarcoma of the rectum. This malady is rare at any age.

Attention was called to the method of Dr. Dudley Roberts of Brooklyn, N. Y. (The Medical Record, Vol. 72, p. 985) for "Gradual Painless Dilatation of the Anal Canal by Dilatible Rubber Bags," which appealed to Dr. Earle forcibly as a very satisfactory means of accomplishing the purpose designed.

Attention was called to the article of Dr. Charles O. Files, of Portland, Maine (New York Medical Journal, Vol. 87, p. 1154), in which he considers that there are two important factors that should be studied in connection with the "Treatment of Pruritus Ani." These are an analysis of the contents of the rectum and the physical condition and mechanical efficiency of the sphincter ani muscles—external and internal.

The normal feces contains about 73 per cent of water. This water holds in solution various volatile, fatty acids, and probably other irritating excrementitious substances. During the retention of the feces in the rectum a considerable portion of the water disappears. In prolonged constipation, the feces become hard and dry, some of the fluid passes by osmosis into the cellular tissue about the anus and thence to the skin. The liquid feces are very often irritating to the mucous membrane of the anus, and cause an intense burning sensation. When this acrid solution is absorbed into the cellular tissue, it causes an irritation of the skin, and we call that irritation *pruritus ani*.

The sphincter muscle, as long as it remains in a normal condition, prevents the passage of any appreciable amount of fluid through it. When, however, the action of the sphincter is made somewhat irregular by the pressure of a hemorrhoidal condition some of the fluid leaks through the anus and causes *pruritus* by direct contact. The skin about the anus is often found to be moist in persons having hemorrhoids.

Dr. F. W. Dudley, of Manila, P. I. (Journal of American Medical Association, Vol. 51, p. 991), reports a "New Bloodless Method of Amputating the Anus and Rectum." A description of the same being given.

Dr. W. Ernest Miles (London Lancet, 1908, Vol. 2, p. 1812), reviews the "Perineal Excision for Carcinoma of the Rectum, and of the Pelvic Colon" and states that so far as he has been able to gather from the literature on the subject, the technic of previous operations seems to have failed in one important respect, namely, the complete eradication of the zone of upward spread of cancer from the rectum, whereby the change of recurrence of the disease above the field of operation can be distinguished, if not entirely obviated. In his personal experience of fifty-seven such peritoneal operations, he found that recurrences took place in periods from six months to three years in fifty-four instances.

In order to ascertain the cause of his failures, he made a postmortem examination of such of his patients who died and found that recurrence appeared in situations that were beyond the scope of removal from the peritoneum, namely, (a) the pelvic peri-

toneum, (b) the pelvic mesocolon, and (c) the lymph nodes situated over the bifurcation of the left common iliac artery. He considers that this area constitutes the zone of the upward spread of cancer of the rectum, the removal of which is just as imperative as is the thorough clearance of the axilla in cases of cancer of the breast, if freedom from recurrence is to be obtained.

The appreciation of this important fact, induced him two years ago to abandon the perineal methods of excision of the rectum and to substitute therefor an abdominal method, comparable to those methods of performing abdominal hysterectomy known as the Wertheim and the Kronig-Wertheim. He then gives the technic of his operation in full, and has formulated what he considers certain essentials, which must be strictly adhered to, if satisfactory results are to be obtained, namely, (1) that an abdominal anus is a necessity; (2) that the whole of the pelvic colon, with the exception of the part from which the colostomy is made, must be removed because its blood supply is contained in the zone of the upward spread; (3) that the whole of the pelvic mesocolon below the point where it crosses the common iliac artery, together with a strip of peritoneum at least an inch wide on either side of it, must be cleared away; (4) that the group of lymph nodes situated over the bifurcation of the common iliac artery are in all instances to be removed; and, lastly (5) that the peritoneal portion of the operation should be carried out as widely as possible, so that the lateral and downward zones of spread may be effectively extirpated.

B. G. A. Moyinham, M. D., Leeds, Eng. "Surgery, Gynecology and Obstetrics," 1908, Vol. 6, p. 463, calls special attention to the "Frequent Recurrences After Removal of Carcinoma from the Upper Rectum and Sigmoid," and also for the necessity of inguinal colostomy on account of the sacrifice of a large portion of the bowel in perhaps a large majority of cases.

"TREATMENT OF PRURITUS ANI, WITH A CONSIDERATION OF ITS PATHOLOGY AND ETIOLOGY."

By William M. Beach, A. M., M. D., of Pittsburg, Pa.

The following conclusions were drawn by the writer:

1. That pruritus ani occurs in mild and severe forms; mostly in middle life; the mild type with simple pruritus, the severe type with marked eczema and skin changes.
2. Certain aberrations in general metabolism, or in adjacent structures are simply incidental and should be considered as complications:
3. Intrarectal growths, as hemorrhoids, adenomas, etc., or the presence of parasites are contributory.
4. The distinct pathogenesis of pruritus ani consists of single or multiple burrowings from the anal pockets, emitting a serous or sero-purulent substance, which sinus may be complete or blind and is always accompanied by proctitis, and frequently by cryptitis, and small ulcers at the anorectal line.
5. These sinuses when complete are the sequelæ to an abscess history, but the origin of the blind recesses is in doubt, and yet it is not unlikely due to an infection by the colon bacillus.
6. The treatment is surgical for the purpose of obliterating the sinuses, correcting a rigid sphincter when necessary, and curing the proctitis and ulceration.
7. Gastrointestinal and general metabolic disturbances must be met by rational measures.

"PRURITUS ANI, ITS ETIOLOGY AND TREATMENT."

T. Chittenden Hill, M. D., of Boston, Mass., said that he was convinced that pruritus ani was practically always caused by some local lesions of the pelvic colon or rectum, which produced an unnatural moisture about the anal region.

He said the most common sources of irritation, in the order of their frequency, were as follows:

- (1) Superficial ulcerations and abrasions of the anal canal. This lesion he found in about 75 per cent of all cases and attributed the frequency of its occurrence to the method of fusion of the proctodeum with the blind end of the bowel.
- (2) Rectitis and sigmoiditis, which are the sequelæ of habitual constipation, often bring about a pruritus, since the passage of flatus allows a small quantity of mucus to escape.
- (3) Hypertrophied anal papillæ and inflammation of the crypts of Morgagni are more often the cause of pruritus ani than is generally admitted.
- (5) Small polyps of the anal canal, protruding internal piles, prolapse of the rectum and anal fissure, do occasionally produce itching about the anus, but it is exceptional to find them the sole cause of chronic pruritus ani.

He stated that in order to attain permanent results, it was essential that the treatment be directed to the removal of the exciting causes. At the same time the skin in the immediate vicinity of the anus should receive appropriate treatment since it is nearly always in a state of acute inflammation from scratching or so much infiltrated and thickened as to require stimulating applications—nitrate of silver and ointments, in order to bring about a return of a normal epidermis.

"BALL'S OPERATION IN THE TREATMENT OF CASES OF PRURITUS ANI WITH REPORT OF A CASE IN WHICH NECROSIS OF THE FLAP OCCURRED."

By Louis J. Krouse, M. D., of Cincinnati, Ohio.

The case reported was that of a severe intractable case of pruritus ani in a man well advanced in years who underwent the above operation for pruritus with the result of having the anal flap necrose. He went into the pathology as to the cause of the necrosis and came to the conclusion that the trouble lay in the poor supply of blood to the anal flap. He claimed that there is no anastomosis between the blood vessels from within the anus and those of the skin. The writer called attention to the fact that Sir Charles Ball's operation has recently been modified so as to prevent sloughing of the anal flap.

A new method of operating was proposed by the author which is somewhat different from that of Sir Charles Ball and of that of Dr. Thomas Charles Martin, and consists, first, in doing away with the elliptical incision which cuts off the greater part of the circulation from the diseased area; and, secondly, in making six to eight linear incisions through the skin into the subcutaneous connective tissue. These linear incisions, beginning at a point outside of the point of irritation, follow the course of the radii of a circle whose center is the anal canal. The skin lying between the adjacent radii are then undercut until the whole affected area is undermined. Should the dissection be difficult and more room be needed, every alternate flap could then be loosened at the anal margin and dissected outwards toward the periphery. After all the adhesions are loosened and the bleeding has been stopped, the parts are again replaced and sutured.

The advantages of this operation over the original one of Ball lie mainly in the better nourishment of the flap. The blood must come from the circumference and must radiate towards the anal canal.

**"A CONSIDERATION OF THE PROPHYLAXIS
AND TREATMENT OF CICATRICAL
RECTAL STRICTURE."**

By Alois B. Graham, A. M., M. D., Indianapolis, Ind.

Opinions were based upon the results obtained in the treatment of fifty-five cases. He stated that prophylaxis implies a careful rectal examination; a careful rectal examination implies an early diagnosis; an early diagnosis implies correct treatment, and correct treatment implies the prevention of a stricture.

When cicatricial rectal stricture is diagnosed, surgical intervention is indicated. In cases where there is no danger of infection, excision should be the choice of all the surgical measures at our command. If successful, its results are ideal because of the fact that it effects a cure by the complete removal of the stricture. In cases where it is not safe to practice the excision method (and there are many such cases), complete posterior proctotomy or colostomy, either alone or combined, should be performed. While neither of these surgical measures have effected an authentic cure, yet they undoubtedly can and have effected a symptomatic cure. Gradual dilatation should be employed only in cases of small annular stricture. The excision method needs no defense as its results are all that could be desired. As for the other surgical methods, the writer was not at all pessimistic as to the results which can be obtained, if they are followed by correct and systematic after-treatment.

**"THE USE OF SPINAL ANESTHESIA IN REC-
TAL SURGERY."**

By Collier F. Martin, M. D., Philadelphia, Pa.

Who reported eighty-seven cases in which trococaïn and stovaine were employed. The technic was given in detail. The method is not recommended where the hips of the patient have to be elevated.

Of the eighty-seven cases, fifty-seven were either frankly tubercular or the condition was suspected, sixteen were alcoholics, four had anemia with from 35 per cent to 60 per cent of hemoglobin, 2 had sepsis, 2 cachexia, 2 were suffering from general debility and old age, 3 had cardiac complications and 1 refused to take ether.

The conditions operated upon were as follows: Abscess and fistulae 54, hemorrhoids 21, rectal stricture 2, sacral sinus 1, fissure with fistula 2, gangrenous cellulitis 2, anal condylomata 2, rectal carcinoma (perineal excision) 2, and Ball's operation for pruritus ani 1.

The only complications observed were headache eighteen times, coming on from one to three days after operation. Only three cases had severe headache lasting over one or two days. A few cases complained of some stiffness of the back of the neck and shoulders. One patient developed a temporary oculo-motor palsy, which recovered under treatment. In two cases spinal fluid was not obtained because of the difficulty in inserting the needle with spinal deformity present.

Spinal anesthesia was selected in cases with pulmonary tuberculosis to avoid the congestion following the use of ether. Alcoholics were also found easier to manage than when ether was used.

Under spinal anesthesia, the sphincters are completely relaxed, there is no muscular spasm and there is an entire absence of the venous engorgement and swelling of the tissues so often seen while the patient is under ether. Bleeding is not as profuse and is more easily controlled, since all parts of the rectal cavity are as accessible as their anatomy will permit. The complete muscular relaxation reduces the traumatism to the tissues.

Spinal anesthesia is at its best when used in operations about the rectum and genito-urinary tract. Careful selection of cases, drugs of uniform strength and purity, and a careful technic will do much to reestablish the confidence of the surgeon in this method of producing anesthesia.

**"VAGINAL ANUS IN THE ADULT, WITH
REPORT OF TWO CASES."**

By Louis J. Hirschman, M. D., Detroit, Mich.

Dr. Hirschman reported two cases of imperforate anus with the anomalous opening occurring in the lower part of the vagina, both occurring in adults. He successfully operated in both cases, restoring the anal outlet to its normal position with a good functional result in both cases. His first case was aged twenty-five, unmarried, and until a few months before examination did not know that she was anatomically different from other young women. She was brought up by a maiden aunt, who, while realizing that her charge was not normal, felt that as long as she was having regular bowel movements, she would put off any operative interference until later in life.

The operation in this case consisted in closing the vaginal anal orifice after dissecting the rectum free from the vaginal septum. There being present an infantile sphincter muscle at the normal anal site, an incision was made through the center of this, and by blunt dissection the tissues between it and the blind end of the rectum were separated. The rectum was then pulled down, opened and sutured to the integument. The perineum was not split open nor was the sphincter divided. A good functional result followed.

His second case was also unmarried, twenty-three years of age. The case was very similar to Case I, except that there was an over-development of the sphincter vaginae, which gave her good fecal control. There was present in this case a small fistula connecting the anus and vulva but not communicating with the rectum. In this case the perineum was split and the fistula dissected out. The vaginal anus was dissected free and brought down to the normal anal site in a manner similar to that pursued in Case I. The perineum was then repaired as in an ordinary perineorrhaphy. The functional result in this case was also good. The author concludes from his experience with these two cases, and realizing the very high mortality from operations for imperforate anus, in infants, that where there is some abnormal outlet for the feces present, it is far better to allow patients to go on in their abnormal condition until they grow old and strong enough for surgical interference and the correction of nature's failure.

**"TUBERCULAR FISTULA WITH EXTENSIVE
INFILTRATION, WITH SPECIMEN
EXHIBITED."**

By Samuel T. Earle, M. D., Baltimore, Md.

Who reported a case of tubercular ischio-rectal fistula, which, on the skin surface, resembled an acute inflammatory condition ready to break down, yet when opened, it proved to be a dense mass of fibrous tissue with only a few tracts of necrotic tissue running through it.

The patient was a policeman, age forty-five; robust and of a ruddy color, weighing 180 pounds; no cough, no history of pulmonary trouble. Patient admitted to hospital December 29, 1906.

The left buttock was very much swollen and inflamed; there were several fistulous openings on its surface, which could not be followed far beneath the skin, and there was one of them that opened just

to the right of the anterior commissure into the anal canal. Upon laying open the buttock between two of the openings, there was exposed a mass of white fibrous tissue that seemed to be encapsulated—except at points which apparently were necrotic—which was adherent to the subcutaneous tissue. Supposing it to be a tumor, which had broken down in places, an incision was made, on either side near each lateral border, for the purpose of removing it, which was done. The mass measured 6x3x2 inches.

It ran down to and some went between the muscles of the buttock, and in one or two instances involved the same. The tract from the inner margin of the mass, to the opening in the anal canal, was then laid open and packed with gauze. The cavity left was so large that sutures were introduced to draw the edges partially together, and to hold in the packing. These were supplemented by adhesive strips.

After the mass was removed, it was found to be composed principally of fat, with here and there a sinus which was surrounded by dense fibrous tissue from one-quarter to one-half inch thick, and there were found several large larvae, supposedly of flies, deep down in the sinuses of the growth. The tapering, tail-like process, that extended over the trochanter major, was composed principally of muscle.

Upon microscopical examination, the growth proved to be tubercular. The patient made a slow but complete recovery. The large cavity filled in completely. The patient is now perfectly well and robust.

“FISTULA IN THE POSTERIOR ANAL COMMISSURE.”

By J. Coles Brick, M. D., Philadelphia, Pa.

Who stated that the anatomy of the posterior anal commissure is of such peculiar arrangement that ulcers or fistulas, in this region, frequently do not granulate in a proper manner.

The greater part of the external sphincter muscle arises from the coccyx, and after forming the ano-coccygeal body of Symington, passes around the anus, forming a Y-shaped or triangular cul-de-sac at the posterior anal commissure, making this the weakest part of the anal circumference. The levator ani muscle is separated from the coccygeus muscle by a cellular interspace, rendering possible an easy extension of pyogenic organisms.

In ulcerations or small fistulas in the posterior anal commissure, it is the writer's custom to make a triangular incision with the apex toward the anus, rather than an antero-posterior cut. In cases of fissure in this commissure, two incisions, one-eighth of an inch deep, are made down into the sphincter muscle on each side of the fissure, all fibrous tissue being removed from the fissure itself.

The physiological action is, that during defecation, the lateral fibers of the sphincter forming the triangular space are at rest, due to their division, thus saving distension of this space, and consequently no interference with healing.

“MODIFIED TECHNIC IN RESECTION OF THE RECTUM.”

By J. Rawson Pennington, M. D., Chicago, Ill.

Numerous illustrations were shown by the author, intended to serve as demonstrations designed and employed by himself and Dr. Gronnerud in resection of the rectum in a special case. The growth for which the method was employed extended upward from the upward border of the levator ani muscle for about two and one-half inches.

A perineoraphy was first done, splitting the recto-vaginal septum back to Douglas cul-de-sac. The rectum was then dissected from its lateral and posterior connections upward until it could be pulled downward far enough to effect an end-to-end anastomosis, when the section, including the growth, was removed.

The incision was closed with buried catgut-sutures, and silkworm-gut for the skin. The posterior vaginal flap covering up, as it did, the operating field, prevents the urine, vaginal and uterine secretions from coming in contact with the wound.

“ABDOMINAL MASSAGE IN THE TREATMENT OF CHRONIC CONSTIPATION, ETC.”

By T. L. Hazzard, M. D., B. S., Pittsburgh, Pa.

The writer referred to the fact that general massage had been practiced from very ancient times until the present for the relief of fatigue and for the purpose of increasing the flow of fluids in the blood-vessels, the lymph spaces and juice canals, by which more perfect elimination of waste is obtained and better assimilation brought about. Two conditions which, in his opinion, the relief of will do away with two-thirds of the slight ailments as well as of some of the more serious ones. He began massage for the relief of chronic constipation and was much surprised to find the far reaching, adventitious effects produced. Among others, for example, that the chalky deposit in the joints in articular rheumatism, under careful, patient, persistent manual therapeutics as applied to the bowels, will entirely disappear more often than not.

Mentioned no particular method, saying that any good text-book would give the technic sufficiently well. This manipulation is recommended not only for chronic constipation, but also for the relief of coprostasis for which operation it is very frequently done.

After indicating more of the benefits and some of the dangers of the method, the writer said that if this treatment called for more time than the physician or surgeon could spare, it had better be left off altogether, although the patient would surely lose a very great benefit. The paper closed with the remark that doubters as to the very great advantages which will accrue to the sick, in many, many ailments, has but to practice careful and intelligent massage to be convinced.

“INTESTINAL AUTO-INTOXICATION; ITS TREATMENT BY IRRIGATION.”

By Wm. L. Dickinson, M. D., Saginaw, Mich.

During normal digestion, there are present in the intestine peptones, crystalline bodies, aromatic substances and ptomaines, which are toxic, but changed into less toxic bodies and eliminated by the stools. Whenever their number is very great, relief is obtained by a profuse intercurrent diarrhea, while the remaining toxic bodies, having been acted upon partially by the digestive mucosa, are changed in the liver, then enter the circulation, and being further changed by the antitoxic glands, finally are eliminated through the skin, kidneys and lungs.

Many patients have suffered for years, and perhaps the greater part of their lives from constipation, and the condition has been aggravated as they have grown older and more sedentary in their habits.

There are well-marked symptoms in the auto-intoxicated. Among the prominent are: A drawn expression; sunken eyes; frequently the so-called liver spots; often the patient is pot-bellied and the skin is dry and harsh; it is quite common to have the bowels

greatly distended by gases, shortly after meals, necessitating the loosening of the clothing; the breath is frequently very offensive; the odor of the stools is sickening, while the stools are constipated, hard, lumpy, and of small caliber or semiliquid and mushy, and upon examination mucus and membranes are found. Patients are often unable to concentrate their thoughts, and there is loss of memory. There is great fatigue, and depression of spirits. Pruritus, urticaria, eczema or furunculosis, caused by intestinal auto-intoxication, may be present.

These are not all symptoms that may arise from intestinal auto-intoxication, but they are sufficient to emphasize the importance of the subject, and the necessity of having the intestinal discharges examined by a competent person before and during the treatment of the patient. An examination of the urine to determine the amount of indican present in cases of intestinal auto-intoxication can be made by any physician, but there are times when a laboratory examination must be made by an expert.

The treatment must of necessity begin with careful attention to the kind and amount of food taken. Vegetables should largely replace meats, and in fact the patient will gain faster if meat is not partaken of at all. There should be a liberal use of water internally—drinking between meals two to three quarts of water daily.

The treatment is not simple and is one that requires attention and generally a long time. The routine method is the administration of calomel gr. 1-10 and podophyllin gr. 1-25, repeated every hour for eight or ten doses, followed with rochelle salt one-half ounce in six ounces of hot water every two hours until the stools are watery. The colon should be distended with warm water, containing half an ounce of soda sulphate to the quart. The patient should be in the knee-chest position. The water should flow slowly, fully distending the bowels, but not causing pain. This washing out of the bowel should be done daily for about one week and the urine should be examined again for indican, and if it is found present, the indication is that there is need of another course of the calomel and podophyllin. The bowel should be made aseptic by the use of sulphocarbolate of zinc gr. 10 to one quart of water used by enemata, retaining as much of it as possible.

The treatment is to keep the intestine as clean as possible.

"PERIRECTAL ABSCESS."

By J. A. MacMillan, M. D., Detroit, Mich.

Who called attention to the fact that in a large proportion of cases of perirectal abscesses, the bacillus tuberculosis is present, and that next in importance, as an etiologic factor, is the gonococcus. A diagnosis is most difficult when the abscess is located above the levator ani. In this location it is frequently found to be complicated with some disease of one or more of the pelvic organs. In this condition it is sometimes necessary to make an abdominal incision both for exploratory purposes and to rectify the condition. In the treatment of the perirectal abscess, however, the drainage should always be from below.

"DISEASE OF THE COLON DUE TO EXTRA-INTESTINAL CAUSES, WITH SPECIAL REFERENCE TO MEMBRANOUS COLITIS—ILLUSTRATIVE CASES."

By A. B. Cooke, M. D., Nashville, Tenn.

The intimate functional relations existing between the several viscera of digestion, which is recognized by all, was pointed out, but the writer stated that the anatomic relations of the alimentary tube and

the frequency with which they are to be looked to for the explanation of many of its pathologic conditions, have not received the serious consideration their importance demands. He also called special attention to certain familiar diseases of the colon, which are often found to exist primarily because of these relations, and the mechanical irritation growing out of them.

Perhaps the most conspicuous of which was cited *membranous colitis*. The writer recalled the great divergence of opinion that has always prevailed as to the true nature and pathology of this malady, and notwithstanding the conclusions of such authorities as Osler, Tyson, Hemmert and others, that the disease is a secretion neurosis, he takes the contrary view held by many other equally careful and competent clinicians, who hold that there are always pathological lesions that bear directly upon the colon, either from without, as by pressure from other misplaced organs, or by adhesions, or by some local irritant from within to account for these cases.

For present purposes the term membranous colitis is limited to that peculiar affection which is characterized by the periodic discharge of mucus with membranes or casts from the bowel, and of which fecal stasis is always a prominent feature. With reference to this type of colitis, Dr. Cooke stated unequivocally that he had never seen a case in which he failed to find some gross pathologic condition of one, or more abdominal organs as well as of the mucosa itself; and, furthermore, that the etiologic relation between the two has been clearly established in a number of cases by the prompt and permanent disappearance of the bowel trouble upon correction of the extra-intestinal condition, after all other methods of treatment had failed. From this experience he had been led to conclude that the primary causes of this particular variety of colitis belongs in the main, if not exclusively, to a special class, namely, those which act mechanically. Most noteworthy in the list of such causes are enteroptosis, right movable kidney, peritoneal adhesions and extra-intestinal growths which occasion continuous pressure upon some portion of the colon.

He then discussed each of these causes in detail and supported his argument by the enumeration of well-illustrated cases.

"NECESSITY FOR ROUTINE EXAMINATION OF THE RECTUM IN INTESTINAL DISEASES—ILLUSTRATIVE CASES."

By Dwight Henderson Murray, M. D., Syracuse, N. Y.

Dr. Murray's paper was one of special interest to the general practitioner and emphasized the necessity for rectal and colonic examinations in all cases of protracted diseases of the digestive tract, whether special symptoms are directed to the rectum and colon or not.

In many cases of gastro-intestinal disturbances the real cause may be found in the rectum or colon, if sought, though the patient gives no symptom of such rectal trouble. These are amenable to local treatment.

A thorough examination, including rectal and bacteriological examination of the stools, should be made in every chronic intestinal case before beginning treatment. He advised that physicians should not treat patients who refuse to allow the necessary examination.

He reported illustrative cases, including so-called intestinal indigestion and dyspepsia, chronic diarrhea, cancer of the sigmoid and internal hemorrhoids.

A case of internal hemorrhoids, where the attending physician had entirely neglected to examine the rectum, had been treated by lavage seven months for so-called dyspepsia and dilation of the stomach with-

out benefit, and was told that a gastro-enterostomy was the only hope of cure. After an operation for radical removal of the internal hemorrhoids he was cured of his dyspepsia. A careful diagnosis would have saved this patient years of suffering.

The patient's life in one instance (possibly) and certainly the general reputation of the medical profession in all of the cases would have been better had the patient been carefully examined.

This neglect was found to be true not only of the physicians in this country, but of physicians in Europe, who had treated some of the cases in the list reported.

The author made a plea not only for local but bacteriological examination, claiming that every case of diarrhea, continuing for a longer time than is sufficient for nature to eliminate the irritating material that may be causing it, is due to a more serious disease.

There are many local conditions that cause a chronic diarrhea which would be eliminated by a simple operation or local treatment. When allowed to become chronic while depending upon oral medication, frequently the time when a cure could be effected had passed, and chronic invalidism or death may result.

"SIR CHARLES BALL'S OPERATION FOR INTERNAL HEMORRHOIDS."

Was the title of a paper read by G. W. Combs, M. D.,

Indianapolis, Ind., in which he briefly described the operation advised by Mr. Ball for the removal of internal hemorrhoids, which consists (1) of making a curved incision opposite the pile being treated, terminating in the mucous membrane on either side of the pile, the greatest convexity not including more than one-third of the revolved anal ring; (2) of bluntly dissecting the pile from the external phincter, the dissection being carried upward until healthy mucous membrane is reached; (3) of crushing the pedicle in a powerful clamp; (4) of passing a heavy silk ligature subcutaneously in the remaining two-thirds of the revolved anal ring and through the crushed mucous membrane pedicle, one part of which is constricted in a first tying and the whole of it in a second; (5) of tying the ligature very tightly, thus bringing the remaining two-thirds of the revolved anal ring up into position, maintaining it there until union takes place and constructing the pedicle so that sloughing will occur.

The results obtained by the writer have not been so favorable as those that should follow the procedure as indicated by the author.

The following are the writer's conclusions:

1. The post-operative pain is greater than after the usual ligature or clamp and cauterization method.
2. The duration of the healing period is not shortened because of the sloughing of the ligature from either the skin or pedicle before union takes place, leaving the wounds to heal by granulation.
3. There is a necessity for unusual watchfulness that all ligatures may be removed as they slough.
4. Failing to secure primary union, skin-tabs frequently remain for subsequent removal.
5. No time is saved by this modification of the ligature operation.
6. There is danger of secondary hemorrhage from an early tearing off of the pedicle by traction.

"THE TECHNIC OF THE INJECTION TREATMENT FOR HEMORRHOIDS"

Was the title of the paper by Dr. Edwin A. Hamilton, of Columbus, Ohio, who stated that the injection treatment does not have a wide application; as its indiscriminate use is followed by embolus, abscess and other complications, and relapses are prone to

occur except in cases especially adapted to this method. The instruments needed are a cone-shaped anal speculum with one broad fenestrum and a special copper-tipped long needle of large caliber with an outside barrel, which may be screwed to the needle proper to regulate the depth to which it may be inserted. The solution is 10 per cent carbolic acid, 90 per cent oil of sweet almonds. Neither water nor glycerine is used in the solution, as they cause pain. When the sphincter is normal or hypertrophied, the hemorrhoids are never strained outside of the rectum and treated there, but are allowed to protrude through the fenestrum of the speculum and attended to in their normal location. In cases where the sphincter is dilated and the hemorrhoids are easily replaced, they may be treated outside, but under no other conditions. From four to eight drops are injected in a hemorrhoid, only one injection being made at one treatment. The patient rests in the recumbent posture for several minutes. No application or dressing is applied. The bowels are moved after the second day. Subsequent treatments may be administered at intervals of five days.

"THE TEST DIET; NITROGEN AND SULPHATE PARTITIONS, AS AN AID TO DIAGNOSIS IN INTESTINAL DISTURBANCES."

By Jerome M. Lynch, M. D., New York City, N. Y.

Who stated that the subject of test-diet, as suggested by Professor Schmidt, is one well worthy of study. If, after a proctoscopic examination of the rectum and sigmoid—and an examination of the stomach contents—a case is still obscure, the test-diet should be given, and an examination of the feces and a thorough examination of the urine, with nitrogen and sulphate partitions, be made. Otherwise, one cannot conscientiously say he has exhausted all the resources at his command.

These tests, he admitted, are not always conclusive, but in most cases they are of great help; often, a positive solution of doubtful problems.

Of twenty-five cases under observation during the last six months, he found three of especial interest. Case I was referred for treatment on account of moderate diarrhea, with prolapsing and bleeding internal hemorrhoids. The stomach had been previously examined with negative results. Proctoscopic examination, except for hemorrhoidal condition, was negative. Put on test-diet. The specimen of feces examined had a somewhat pasty consistency, a light yellow color, normal odor and showed no microscopic admixture. Microscopic examination showed the usual amount of striped muscle fiber, carbohydrate food remnants and granular detritus, with an excess of free fat and fatty acids. The starch was properly digested; bacterial flora, not excessive; reaction, neutral. Sublimite test, negative. Fermentation test, negative. The specimen showed evidence of deficient bile admixture.

The analysis of a twenty-four-hour specimen of urine showed the specimen to contain no albumen and no renal elements, with a normal daily amount of urea, a normal specific gravity and a normal daily excretion of urea. The sulphate ratio as well as the ratio of the urea and uric acid was somewhat depressed, with the presence of a marked excess of indican.

Analysis of this report disclosed at once the cause of the diarrhea, namely, deficiency of bile with excess of fatty fluids and depressing of sulphate ratio, causing auto-intoxication.

The other two cases were equally interesting.

Relative to the determination of the clinical significance of faulty sulphate and nitrogen partition, the writer stated that the relative increase in ethereal sulphate may be due to one of several causes, among which were mentioned: Stasis in the bowel, inges-

tion of decomposing nitrogenous food, improper digestion of food in the stomach and upper intestine, by diminution or absence of hydrochloric acid and bile, the result of excessive or faulty bacterial fermentation in the lower portion of the small intestine and the upper portion of the large intestine. This process may exist without an actual toxemia, and an actual toxemia may exist without this particular putrefactive process; but they are usually associated.

Excess of ethereal sulphate is usually associated with an excess of endoxyl sulphate, though not always. Without means of estimating the amount of the actual products of toxemia, the relative excess of ethereal sulphates is used as a guide, although subject to errors, as are other guides.

Fault in the nitrogen partition would seem to justify the inference that the hepatic function is disturbed. The decrease in the relative amount of urea nitrogen probably indicated the degree of the fault. With this decrease, there is a relative increase in the amount of one or more of the other forms of nitrogen in the urine. In the severe toxemias of pregnancy, pneumonia, etc., this is chiefly in ammonia nitrogen and creatin in nitrogen; in digestive disturbances the increase in the so-called extractive nitrogen, and in lithemic cases and in those of cyclic vomiting, headache, or albuminuria, in the purin nitrogen as well, particularly during the acute attack. In cases of enteritis or colitis, owing to the destruction of cells, the purin nitrogen is often increased.

Faulty nitrogen partition may exist without a toxemia but a hepatotoxemia without a faulty nitrogen partition is practically unknown. Acidosis frequently accompanies a faulty nitrogen partition; but it would seem an evidence of the toxemia rather than of the fault in hepatic function, though this is disputed by some.

"MULTIPLE ADENOMATA OF THE RECTUM."

By James P. Tuttle, M.D., New York City.

Who stated that the distinction between multiple adenomata and polypi is more marked clinically than histologically. Pendunculated adenomata or polypi may exist in varying numbers without constituting a true multiple adenomata. Age and its relation to the two types; distinction between the two types in proportion to the number of growths; the relative frequency of the growths in different portions of the bowel; growths found largely in the sulci and not in the mucous folds of the bowel. What is the probability of malignant metamorphosis when not interfered with? The tendency to recurrence, in malignant form, after surgical measures? Results of internal and local medication; results of functional rest to the parts. Does radical operation furnish the best hope for the patient, in view of the clinical experience?

"SURGICAL TREATMENT OF DIARRHEA AND A DESCRIPTION OF A NEW CECOSTOMY WHICH PERMITS FREE IRRIGATION OF BOTH THE SMALL AND LARGE INTESTINES."

By Samuel Goodwin Gant, M.D., LL.D., New York City, N. Y.

In this article attention was first called to the frequency of occurrence of chronic diarrhea and the simplest and most reliable methods were briefly outlined of diagnosing ulcerative lesions of the colon inducing diarrhea and also the relative frequency was mentioned between gastric and hepatic diarrhea and those caused by local disease of the large intestine. The author then proceeded to make the following points:

First. That acute attacks of diarrhea could some-

times be controlled by diet, rest and internal medication, and, further, that the frequency of the evacuations could occasionally be diminished by these therapeutic measures in chronic diarrhea but that a cure of the latter could be accomplished only in rare instances in this way.

Second. That the treatment of chronic ulcerative colitis by internal medication should be abandoned because it is harmful in many ways and utterly unreliable in so far as a cure of the diarrhea is concerned.

Third. That *direct bowel treatment* by lavage or medicated irrigation introduced through the anus or from above through the appendix or cecum, is the only rational treatment for diarrhea due to ulcerative lesions of the colon.

Fourth. That operative procedures are contradicted except in cases where, for any reason, the colon tube cannot be introduced sufficiently high to insure thorough washing out of the entire large bowel and when operative procedures are declined.

Fifth. That the surgical treatment of chronic diarrhea gives universal satisfaction and that he recommended appendicostomy and cecostomy for the relief of this ailment with the same confidence that he did appendectomy for appendicitis.

Sixth. The relative values of *resection, intestinal exclusion, colostomy, appendicostomy, simple cecostomy and cecostomy* with an arrangement for irrigating the small intestines (Gant's operation), in the treatment of chronic diarrhea, were fully discussed. The results of his experience show that appendicostomy and cecostomy could be performed most quickly, where the least dangerous, give the best results and were less often followed by unpleasant sequelæ than the other procedures.

Seventh. He stated that formerly he was prejudiced in favor of appendicostomy, but that a more recent and larger experience had caused him to look with greater favor upon cecostomy, especially when combined with irrigation of the small intestine. He maintained that his cecostomy was suitable in all cases of chronic diarrhea, because it could be employed when the frequent stools were due to both an enteritis and an ulcerative colitis and when the lesions were confined to the colon alone; and, further, that his operation should supercede appendicostomy, in many instances, because the appendix was frequently unfit for irrigating purposes because it was too short, too narrow, strictured or bound down by adhesions and often had a tendency to become necrotic, slip back into the abdomen, become closed when not kept open by the introduction of a catheter and that appendicostomy was not suitable when the small bowel was diseased.

Eighth. He then briefly described the technic of his cecostomy with provision for small intestine irrigation, the main idea of which consisted in making an opening in the cecum and inserting two tubes, one into the cecum and the other into the small intestine through the ileo-cecal valve by the aid of a catheter-carrier. He claimed that the advantage of this procedure over other operations was that either the small or large bowel could be irrigated at will and that there was no fecal leakage about the catheters.

Ninth. In concluding his remarks, he summarized the results obtained by him in the surgical treatment of chronic diarrhea by the through and through method and reported thirty-eight cases treated by appendicostomy, and fourteen by cecostomy, eight of the latter being operated upon by the Gibson and the remainder by his new procedure, and said that the universally successful results obtained by surgery in this class of cases is far better than those obtained by the use of the time-worn way, where they depend upon dieting, rest and medication, as practiced by many physicians today.

"A REPORT OF TWO CASES OF ANOMALOUS SIGMOID."

By Arthur Hebb, M. D., of Baltimore, Md.

One case was an extremely long sigmoid, reaching from the mammary line to a point midway of the thighs, when withdrawn from the abdomen; the second case was a short sigmoid, with a mesentery three-fourths inch in length, situated above the crest of the ilium, on a line with the lower border of the last rib, coming off from the descending colon. It was only four inches in length. The descending loop, with no mesentery, ran down over the bifurcation of the left iliac artery and ureter; then forward, hugging the left side of the pelvis and down over the anterior and posterior branches of the internal iliac artery, where it joined the rectum.

"NEVUS OF THE ANAL REGION, WITH REPORT OF A CASE ASSOCIATED WITH INTERNAL HEMORRHOIDS."

By Lewis H. Adler, Jr., M. D., Philadelphia, Pa.

The author of this paper mentioned the rarity of this condition as an anal affection. The patient whose condition was detailed was a male, aged forty, whose habits were good. From birth he had a noticeable fullness at the anus, which as he grew older occasioned him considerable annoyance when walking and at stool. When twenty years old he had had an operation for hemorrhoids performed, which temporarily gave relief. As time went on his hemorrhoidal trouble returned and the external congenital fullness became worse. Bleeding frequently attended efforts to have an evacuation, though the bowels were never what might be called costive.

Examination prior to operation revealed a mass of thickened skin of a dull purplish hue, surrounding the anus, about two inches in width and elevated from the surrounding skin about one-sixteenth of an inch. Scattered over this area were numerous hairs. The anus was quite patulous, and, upon bearing down, a hemorrhoidal mass protruded and the external portion, around the anus, visibly increased.

A diagnosis was made of nevus associated with internal hemorrhoids, and an operation was advised, to which the patient readily consented. At this time he was apparently in fair physical condition and by no means markedly anemic, although his color was far from normal and he lacked what might be termed resistance. His weight at the time was 151 pounds and his usual weight being stated to have been 170 pounds.

An operation was performed on March 29, five days after he was first seen by the writer. The patient took the anesthetic very badly, it requiring over a half hour to get him in a condition to be placed upon the operating table. After the removal of the hemorrhoids, which were as large as any the writer had ever seen—the tissue composing them being much thicker and denser than is usually encountered in ordinary cases—the patient's condition was that of profound collapse. The usual clamp and cautery method was used for the removal of the five hemorrhoidal masses present. After the administration of a hypodermic injection of atropin and strychnin, the patient rallied, and the nevus was then excised. The removal of the latter caused very little loss of blood, so much so that its absence was remarked upon by several of those who witnessed the operation, and during its removal numerous veins were noticeable upon the under-side of the growth, which stood out in their distended condition and showed a characteristic bluish color.

By the time this step was completed, the patient's condition was bad again—the pulse weak and the skin moist. The usual dressings were applied; no attempt being made to unite the edges of the wound and the

patient was removed to his room, where a hypodermoclysis was promptly given, to which was added four ounces of whiskey. His condition gradually improved but within five hours he was dead. The manner in which he died led to the inference that his death was due to a cardiac embolism.

The pathological findings of the specimens removed as made by the pathologist of the hospital, Dr. James A. Kelly, showed that the growth was that of a simple nevus.

"APPENDICOSTOMY AS AN AID TO THE TREATMENT OF MALIGNANT AND INTRACTABLE DYSENTERY."

By John L. Jelks, M. D., Memphis, Tenn.

In reference to this subject, the author stated that when amebic infection had become very chronic or had extended into all the parts of the colon beyond the use of local measures, and, in some instances, of acute malignant cases, appendicostomy should be performed and irrigation practiced through the appendiceal stump. The water is allowed to pass out through the rectum into a catch-basin and is not an unpleasant method of treatment. Dr. Jelks prefers the method suggested by Dr. James P. Tuttle of New York City, who conceived the plan of allowing the appendix to remain undisturbed after anchorage, for a sufficient time (three or four days), to establish adhesions about the proximal end, before cutting away the distal portion and using the appendiceal stump-lumen through which to irrigate with the desired solutions.

Dr. Jelks practiced this method and irrigated the colon with formalin-boric, copper-phenol-sulphonate, quinin and normal salt solutions with gratifying results. It was observed, however, that irrigation thus given did not effect a cure. Topical applications (per sigmoidoscope or rectoscope) were in all cases used in conjunction.

The method as used by Weir, and as advised by Tuttle, is practically free from danger, and the author believes is not more hazardous than appendicostomy and the after-effects are not at all unpleasant to the patient in the ways and degrees that a colostomy must be. He sees no great danger of hernia or wound infection if proper precautions are taken in dressing the same. By this method one may practice almost continuous irrigation of an inflamed colon and rectum with no special degree of pain or discomfort to the patient—the appendix being used as a nozzle, directing the solution into the colon.

He does not advise appendicostomy except in a small percentage of cases, mostly chronic ones, but in these he insists it is a most valuable aid to treatment and that the operation itself is practically free from danger, as is appendicostomy when the appendix is not the seat of infection.

The author concludes his article by stating that in all cases requiring appendicostomy we should not permit the stump to close before the expiration of one year. He has been forced to reopen an appendiceal stump three months after closure and resume irrigations. This was accomplished in his office, but it may become a difficult matter to find the lumen of a closed appendix.

"PRIMARY GONORRHEA OF THE RECTUM IN THE MALE."

By Alfred J. Zobel, M. D., San Francisco, Cal.

The writer stated that a review of the literature for the past five years showed very little to have been written on the subject of rectal gonorrhea, and the cases reported have been rectal gonorrhea in the female and for the most part secondary to an infection of the genital tract.

It was also stated that gonorrhea of the rectum in the male is almost always the result of sodomistic practices, and when so, can be considered of the primary type. The condition has been rather rare in this country, but since the influx of foreigners from those countries where unnatural practices are common, more cases are now seen.

The cases reported by the writer were seen in the rectal clinic at the San Francisco Polyclinic and were in American boys of sixteen, eighteen and twenty years of age, respectively. They belonged to the tramp class and were of a rather low order of intelligence. They were ignorant of their true condition and came to the clinic with a self-made diagnosis of "piles." When made aware of the true nature of their trouble it had a markedly depressing effect upon them, which in one case, after a few weeks, developed into a condition resembling the neurasthenia which often accompanies a chronic posterior urethritis.

The symptoms complained of, briefly summarized, were: All complained of such soreness about anus and rectum that they did not care to stand; while walking was an effort and caused great pain. At the time of bowel movement they suffered such excruciating pain that they hesitated to pass their feces, and had become quite constipated. Two were annoyed by discharge from the anus, while one was unaware of its presence, although it was found, on examination. In one, the discharge was streaked with blood, and bleeding was noticed at the time of defecation. One complained of an itching sensation about an inch up from the anal aperture, and had severe pain on the drawing in of the anal sphincters. Their appearance was feverish, worried and haggard, and they felt weak, ill and distressed.

It was impossible to make a digital or instrumental examination at the first visit on account of the severely acute pain caused thereby. Therefore, whenever there is the least suspicion of the possibility of a specific inflammation of the anus and rectum, the case should be treated as if it actually exists, and the ultimate diagnosis left to the future. When the acute symptoms have subsided under treatment, there can be seen excoriations and fissures about the anal orifice and in the canal, with marked redness and infiltration of the mucous membrane of the anus and rectum, together with the presence of a purulent secretion. Examination of this secretion shows the presence of the gonococcus.

The author believes that gonorrhea of the rectum in the male is a much more common condition than is suspected by the general profession. Many of the latter even do not know that such a condition could exist.

The treatment is directed towards keeping the parts clean; relieving the severe rectal symptoms, reducing the inflammatory exudates; keeping the fecal movement soft; healing the ulcerations and destroying the infective agent.

The author further brings out the important point, which he deems worthy of consideration, that there seem to be no reasons why complications, such as gonorrheal arthritis or an endocarditis could not arise. While so far as he is aware no case of an endocarditis or an arthritis resulting from rectal gonorrhea have been reported, yet it would be well for the internist to bear in mind that an examination of the rectum might furnish the clue in a baffling case, where the etiological factor is missing.

"OPERATION FOR ANAL PRURITUS."

Thomas Charles Martin, M.D., of Washington, D. C.

The use of a solution of cocain and adrenalin secures local anesthesia and a dry visible field. Radiating incisions do not endanger the nutrition of the parts. Corrugation of the flaps may be effaced by

traction of their margins. A skin-tag may be removed within an elliptic incision, which by suture may be given a linear form. Radiating wounds require no suture, coaptate automatically when the patient is in extension, and heal by first intension.

Book Reviews.

Diseases of the Eye—By Charles H. May, M. D., chief of clinic and instructor in ophthalmology, College Physicians and Surgeons, Medical Department of Columbia University, New York, 1890-1903; attending ophthalmic surgeon to Mt. Sinai Hospital, New York; consulting ophthalmologist to French Hospital, Gouverneur, Red Cross and Italian hospitals, New York. Sixth edition, 391 pages. William Wood & Co., New York. Price, \$2.00.

This book was written especially for the general practitioner and the student, being a concise, practical and systematic manual of diseases of the eye. The author has passed by rare conditions and uncommon affections by merely mentioning them, but the more common diseases which the general practitioner is called to treat have been described with comprehensive fullness. The book is a complete revision of the fifth edition, and new chapters on Transillumination, the Conjunctival Tuberculin Test, Cerebral Decompression, etc., have been added. It contains 362 original illustrations, including twenty-two plates and sixty-two colored figures. R. C.

BOOKS RECEIVED.

Lea & Febiger, Philadelphia:

Hyde's Treatise on Diseases of the Skin.

Hare's Practical Therapeutics.

Abbott's Bacteriology.

Calkin's Protozoology.

Simon's Manual of Chemistry.

Evans' Obstetrics.

Principles and Practice of Medicine: By Edwards. (Second edition.)

Minor and Operative Surgery, Including Bandaging: By Wharton. (Seventh edition.)

D. Appleton & Co., New York:

Thompson's Practical Dietetics. (Fourth edition.) Price, \$5.00, in cloth.

Treatise on Tuberculosis: Edited by Dr. Arnold C. Klebs. Price, \$6.00, in cloth.

Warbasse's Medical Sociology. Price, \$2.00.

Osler's Principles and Practice of Medicine: (Seventh edition.) Price, \$5.00, in cloth.

The Tubercle Press Bureau, Chicago, Ill.:

The Renewal of Life: By Thos. B. Keyes, M. D.

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The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

POSTOPERATIVE ILEUS, GASTRO-DUODENAL IN TYPE.*

(Anderson Watkins, M. D., Little Rock.)

Following an operation, the surgeon is sometimes confronted with the condition known by a variety of names, including "postoperative ileus" and "acute dilatation of the stomach." As in many other complices of symptoms, we are unable to speak definitely of the cause or causes. Indeed, the more we study acute ileus, whether it be primary or secondary to surgery, the more prominently does one fact stand out, namely, that one or more of several factors is responsible for its occurrence. However, we must be intelligible, so let us confine this paper to one certain type; let us study that form of postsurgical ileus which consists of a paralytic dilatation of the stomach and usually of the duodenum, and only refer, by way of differentiation, to mechanical obstruction of the small intestine. Please bear in mind, then, that I am describing acute gastro-duodenal dilatation occurring as an operative sequel.

Before attacking the question of etiology, let us see what we can learn of the frequency of this postoperative disaster.

From the literature, and including instances in my own experience, I know of ninety-nine cases, over 40 per cent of reported cases from all causes. Operations in the upper abdomen seem to especially favor the production of ileus, but the lower abdomen and pelvis are not immune. Hemorrhoidal extirpation, and even amputations and disarticulations, have given rise to gastric dilatation. Surgery of the kidney has been responsible

for some cases. You can readily see from the literature of a subject which has only been generally studied of late years that we are not dealing with a surgical curiosity. When one recalls the possible—nay, probable—cases he has overlooked, he realizes that the affection is not even rare.

The etiology is far from clear. Byron Robinson, with others, believes that gastro-duodenal dilatation in general, including postoperative cases, is due to compression of the duodenum by the superior mesenteric vessels. Conners reports a case of this description, and Bloodgood several, including primary and secondary forms. But in the autopsies of 120 cases of ileus, only twenty-seven showed evidence of compression by the mesentery. It has been thought by some that prolapse of the small gut into the pelvis favored the mesenteric pressure. But the pressure upon the duodenum may just as well be from the dilated stomach as the mesentery, and it is not uncommon to find the small gut in the pelvis without causing appreciable symptoms. Discarding for the moment the limitation of our subject to surgical sequelæ, we note acute gastro-duodenal dilatation in typhoid, rheumatic fever, pneumonia, biliary disease, biliary surgery, handling or cooling the intestines, local peritonitis and injuries or disease of the spinal cord between the seventh cervical and sixth dorsal vertebræ. In these cases mesenteric compression played no part. I, myself, have seen acute dilatation of the stomach in pneumonia, rheumatic fever, following the opening of an appendiceal abscess, as a sequel to abdominal section for ruptured bladder and after other laparotomies. In quite a number of autopsies the paralytic dilatation extended beyond the duodenum, without any mechanical obstruction. In brief, we are dealing with a disturbance of innervation of the stomach and small intestine. Ex-

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

perimentally it has followed section of the vagi. It may be toxic, it may be reflex, it may be from infiltration due to local peritonitis, or it may be traumatic. The disturbance may be central, as seen in brain and cord lesions. Whatever the cause, the essential trouble is not the dilatation, but paralysis of the musculature upon which the dilatation seems to depend. At autopsy the dilated stomach, having the appearance of a sack hung between two points, usually occupies the upper abdomen, but may extend into the pelvis. The duodenum is likewise greatly stretched and U shaped. The muscle fibers in the gastric and duodenal coats show thinning and separation, from the stretching. With the exception of an occasional area of degeneration, there is no special pathology. At times a valvelike fold of mucous membrane is seen at the cardiac orifice.

SYMPTOMS.—Onset is sudden, and may immediately follow postanesthetic vomiting or may occur in a few days to two weeks. Usually symptoms appear on the third day. Nausea and vomiting, with gaseous eructations, occur in 90 per cent of the cases. The vomiting commences suddenly, is frequent and projectile in character. I have seen it occur without the slightest warning. The vomitus is at first composed of stomach contents, is usually somewhat foul, is straw-colored, and later is tinged with bile and other duodenal contents. The contained pancreatic juice may erode the lips. The vomited material is excessive, presenting the features of a hypersecretion, which is a diagnostic feature. Another point in the diagnosis is absence of fecal vomit. In the later stages vomiting may cease, or periods of temporary improvement, in which there is no vomit, may appear. Pain is complained of, principally in the epigastrium. Palpation in this region elicits little, if any, tenderness, nor is there true muscular rigidity. In cases caused by or complicated by peritonitis, both tenderness and rigidity are present. Distension is marked, particularly in the epigastrium. In the earlier stages the swelling is limited to this region, but later may extend over the entire abdomen. Needless to say, the percussion note is correspondingly tympanitic. In the type we are now studying, absence of peristaltic waves and of borborygmi is a pronounced feature. Feeble and reversed peristalsis may be present at first, but soon subsides to nil. Constipation is also a symptom.

The temperature, in the absence of inflam-

matory complications, is normal or subnormal. The pulse is at first slow, but increases in rapidity. When collapse supervenes, the pulse corresponds. The urine is diminished or suppressed. In the face one sees a typical anxious expression, which becomes Hippocratic with the approach of collapse. Owing to fluid starvation, thirst is a prominent feature. In short, I have attempted to present the picture of a most distressing and dangerous phase which sometimes presents itself as an operative sequel. Its mortality has been variously estimated at between 60 and 80 per cent. On the other hand, I doubt not that we have overlooked many mild as well as some severe cases which have recovered. The description I have given is of the graver type, and I am satisfied that with additional reports of mild and earlier treated severe cases the mortality will drop.

As in many other affections, the possibility of acute gastro-duodenal dilatation must be borne in mind when making a diagnosis of a postoperative setback. Not infrequently the surgeon finds that an operation is the beginning of a new train of troubles. So, then, the diagnosis is important. It should not be difficult when based upon the symptoms already outlined, particularly the sudden postoperative onset of vomiting and belching, epigastric distension, deficiency of peristalsis, absence of fever, and other signs of peritonitis, and the testimony of the stomach tube, which reveals an excess of gastric contents, and absence of fecal matter, and greatly relieves the distension. Intestinal obstruction from adhesive bands or other mechanical causes, usually more gradual in onset, is not characterized by such special epigastric distension, is not relieved by the stomach tube, and presents a fecal vomit. When acute ileus is caused or accompanied by abdominal or blood infection, the picture is not so clear, calling for a careful weighing of pros and cons. Indeed, it may be necessary to diagnose through an incision.

Needless to say, it is better to prevent than to cure. Prevention, in this instance, implies a careful study of the patient preliminary to operation. Too often we are prone to devote too much attention to the surgical lesion at the expense of the other organs. Is it not desirable to ascertain the nervous ensemble, the kidney capacity, the state of the pulmonary and vascular apparatus, the presence or absence of various alimentary lesions? Preliminary light, but adequate, feeding, and

omission of excessive purgation are important to success. Simple and speedy operative technique and a minimum of anesthetic will ward off many unpleasant sequelæ.

As to the treatment of actual dilatation when it occurs, we may accept at present that surgery offers little hope. Gastro-enterostomy and duodeno-jejunostomy have been done under the mistaken idea that they are drainage operations. McWilliams recently operated on two cases successfully, doing a median section below the umbilicus and irrigating and draining the bowel. But in his cases the distension was far beyond the duodenum into the jejunum.

Then the meat of the matter is that results depend upon an early diagnosis, with prompt treatment; all food and drink must be withdrawn from the stomach. The stomach tube is to be used early and often, the foot of the bed raised and the patient turned upon the side, preferably the left, or upon the abdomen; this maneuver to be preceded by gastric lavage. Gentle massage of the abdomen from below upward is beneficial, as are turpentine stupes. Rectal saline injections and nutrient enemata are strongly indicated.

Eserin salycilate gr. 1-50 to 1-100, hypodermically, offer the strongest medicinal stimulant to peristalsis. When an operated patient continues to vomit beyond the usual post-anesthetic period, inspect the abdomen immediately, removing whatever dressings are necessary. The motif of successful treatment is frequent antiseptic gavage, but the keynote is early diagnosis and prompt measures for relief.

DISCUSSION.

Dr. Runyan—As on yesterday, I want to impress on you the importance of prophylaxis, the proper preparation of the patient, and the giving of such directions as I consider are very important in the prevention of this condition. As I said yesterday, I believe that $\frac{1}{8}$ gr. of morphin and 1-150 gr. of atropin, as a routine before operation, is a good one; in addition to that, I believe at least 1-30 gr. of strychnin should be given hypodermically a short time before operation, and in adults this 1-30 gr. of strychnin should be taken for at least two or three days, especially if there are any signs or symptoms of this condition setting up, and the early recognition of the very beginning of the condition is most important. Not only the recognition of it, but getting to work to prevent its making further progress.

Wash out the stomach thoroughly, use a stomach tube, and wash out the stomach early and often. Give your hypodermics regularly, and keep the stomach empty. Don't give the patient water for at least twenty-four hours after any abdominal section. Give them a saline solution via the rectum, and they won't get thirsty. Give them a little liquid peptonoid, along with the salines, and your patients will not suffer from thirst; neither will they suffer from lack of nutrition.

Dr. Guthrie—I think an important point is the method of inhalation. The intimate relation of the olfactory bulb to the base of the brain and spinal cord and pneumo-gastric nerve we have never yet been able to work out. I called attention to this matter, I believe, eleven years ago in my address in the Section on Surgery. I have always looked carefully to having the patient inhale, starting off while awake, through the mouth; talking to them beforehand and having them inhale through the mouth and out through the nose, either chloroform or ether.

Just two weeks ago I had a case in which the gentleman giving the anesthetic took it as a joke. The patient had been taught to breathe through the nostrils, which was right, because in the ordinary way of living the nose is the right place to inhale. This patient was more or less of a neurasthenic. I did not advise operation, but I was present and participated in it, and assume my share of the responsibility. This patient breathed in through her nostrils and out through the evaporating cap. We had a postoperative ileus and a very prompt death. That's the only case I have ever seen in my practice. That's the only case in eleven years. I believe we could avoid absolutely the danger of it if we continued our investigations along that line. There is something about it we have not yet worked out. The best men have not yet worked out the intimate relation between the olfactory bulb and its deep origin in its connection with the pneumogastric nerve.

Dr. Thompson (Hot Springs)—It occurs to me that Dr. Watkins has not had an opportunity to discuss the treatment. All of us can give our experience and talk about what is best to do. Every surgeon who visits the hospitals knows the routine of giving strychnin, washing the stomach, etc. I am not inclined to discuss those points, for they are too familiar. But I feel that our friend Watkins would have given us some of his ideas as to treatment if he had a little longer time.

Dr. Dorr—I want to emphasize one point. They speak of prolonged anesthesia as one of the causes of this condition. I believe that is true, but this thing of laying everything on the anesthetizer is the baby act. If you properly prepare your patient you have these very things. What does “prolonged anesthesia” mean? It means a prolonged manipulation of that surgeon, or it would not be prolonged. If he knew his business it probably would not be necessary to have prolonged anesthesia. So, the anesthetizer is not always to blame. It is because the surgeon has not made proper advance and is often not skilled enough to perform his operation. Don’t lay it all off on the anesthetizer. Prolonged anesthesia all comes about because the surgeon cannot do the work in the proper time that he should do it. Proper preparation of the case is one of the most important things. Any man who will study his case and take months to prepare himself, if necessary, will have very little mortality. But the man who prepares his patient in two or three days and knows nothing about the kidneys, nothing about the skin or bowels, cannot make a correct diagnosis. I don’t mean that he is bound to know the exact pathology, but I do mean he ought to know whether it is a surgical or medical case. Don’t go down into the belly, or any part of the human body, for that matter, unless you know that it is a surgical case.

Dr. Snodgrass—I think everything has been said on this subject that could be said with any interest. But I have heard of cases of this kind to occur without a surgical operation or anesthesia, either. Very often they die from that cause. I don’t like to see the society misled. They come without a surgical operation of any kind, as has been so graphically described in this paper, and as every surgeon here can testify.

Dr. Smith (Hot Springs)—In these peculiar conditions the doctor is handicapped. He is rarely prepared for it, because it is unexpected, and perhaps by the time it has established itself the symptoms have become pronounced and much has been done that he cannot undo. The etiology of this disease has not been well established. The characteristic symptoms of pseudo-ileus are intestinal paresis, or inability to secure bowel movement; general tympanitic condition of the bowels, apparent exhaustion of the vital forces, with normal or subnormal temperature and feeble pulse. This is not necessarily a surgical condition, and not necessarily a traumatic condition. It is more fre-

quently found in extreme exhaustion, following operations. It is usually met with or seen from one to five days following abdominal operations. We sometimes encounter this peculiar condition of intestinal obstruction brought about by a certain degree of muscular paralysis of the intestinal tract. The term “delayed shock” has been used erroneously; also, it has been complicated with or termed a part of peritonitis, which is also erroneous. Some authors attribute it to prolonged anesthetic exposure, which is not necessarily true, though prolonged anesthesia, or anesthetic exposure alone, may have something to do with its favorable production, inasmuch as paralysis is effective during anesthesia. We do not know just what conditions are favorable—what the characteristic lesions are that accompany it. One of the more prominent symptoms favorable to paralysis is prolonged anesthesia, which seems to favor the condition, therefore more favorable to the absorption of toxins and poisons. Pseudo-ileus, or intestinal paralysis, does not necessarily follow major, or formidable operations; but seemingly more frequently follows minor operations, not necessarily intestinal operations, nor operations at all, nor is it necessarily preceded by trauma or severe prostration.

I have seen several cases recently at Hot Springs, whether brought about by excessive treatment of iodid of mercury or whether due to the disease for which it was given, I don’t know. I remember one I saw about two months ago. I was called to see the case about twelve o’clock at night, in consultation with another doctor. The symptoms had been present for four or five days, increasing. We sent the patient that night in an ambulance to the hospital, where he might have more methodical treatment. He was then under profound prostration. He died about five hours following.

I can find no literature on the etiology of the subject, but the more I see of these things the more I am inclined to agree that the neurotic character, the abnormal nerve force or peculiar idiosyncrasies on the part of the patient are responsible in a great degree for the condition of the nervous system which permits such profound exhaustion. The neurotic element may therefore not be able to offer systemic resistance to such a degree as would prevent normal action. Lumbar pain and pain at the base of the occiput often follows or precedes local abdominal symptoms. Sometimes the lumbar region and the whole intes-

tinal tract are involved. Symptoms limited solely to the intestinal tract are rarely found. Ileus differs from all cases of intestinal obstruction by its rapidly fatal course if unrelieved. In other words, these cases usually terminate fatally unless recognized early and treated successfully. It is supposed to be caused by changes in the central nervous system. According to some, it is the direct result of toxic effects, due to increase and migration of the bacilli coli communis. Ileus is most usually seen in cases of emergency, where the patients have not been well prepared for operation by elimination in the intestinal tract and digestive system.

In the line of medication, aside from this attempting to establish peristalsis and empty the intestines, the best remedy I have found, after watching and guarding the vital forces, stimulating and toning, is atropin and eserine. But, as I said before, we are so often handicapped, and the mischief has been done before we are called, that we resort to possibly all the methods that would be beneficial. As it is the irrigations and other things, the effect is merely stimulating upon the nerve centers, and it would be necessary to do something radical before the mischief would be righted.

Dr. Cargile—I think the author failed to call attention to anesthesia, especially prolonged anesthesia, if I did not misunderstand his remarks. However, it was mentioned by some of the others. This is usually recognized as one of the prominent causes of this condition. I believe a great majority of the writers stress it as being one of the causes.

Dr. Watkins—In a paper of this kind I did not go over the routine which every surgeon knows in the handling of his case. It has been intimated that we should study our cases carefully and observe them carefully prior to operation. But some of these cases come in emergency work, where the demand for surgical interference is immediate and life is threatened, owing to an accident, and we have, therefore, no time for prolonged investigation of the patient personally. I didn't read my paper; I tried to talk it. I omitted some things in it, as to the effect of prolonged anesthesia and prolonged manipulation, to which prolonged anesthesia, of course, is due. As Dr. Dorr has well said, we must not lay the blame on the anesthetizer, because he only stops when we tell him to. As to the treatment of the actual condition itself, I will say that diagnosis is most important, because we must make a differentiation between mechan-

ical obstruction of the intestines and paralytic dilatation of the stomach. The surgical treatment of paralytic dilatation is of no avail, as far as I know. Gastro-enterostomy and duodeno-jejunosomy have been done under the mistaken idea that they were drainage operations, which I think investigation probably will prove, or has proved, is not so. Now, use the stomach tube first, last and all the time. And position, I think, perhaps, should be mentioned here in the discussion of the treatment. That is, the foot of the bed should be elevated. This in contradistinction to treatment for mechanical obstruction. The foot of the bed should be elevated and the patient placed upon the side, preferably the left side, or upon the abdomen. This to be preceded by gastric lavage. Eserine salicylate may be used with favorable results in mild cases.

The keynote to successful treatment is early diagnosis.

TETANUS.*

(G. A. Warren, M. D., Black Rock.)

This is a specific disease, produced by an infection known as the bacillus tetani, which is rod-shaped, and usually has a clump at one end, which contains a spore. Yet some of them are long and of equal size throughout. This bacillus is difficult of culture because of its peculiar anaerobic qualities being unable to propagate in the presence of the slightest particle of free oxygen. This should give us a cure as to the antiseptic we may apply to wounds where this microorganism is suspected. Strong bichlorid and acid solutions have little effect toward destroying the organism. The bacillus may remain in dust or dried pus for months and retain its power of infection; it can also be subjected to high powers of heat, or be frozen, and yet retain its infective power. But the application of hydrogen peroxid, silver nitrate or strong solutions of same, also strong solutions of potassium permanganate, we ought to be able to destroy the vitality of the organism easily. I hope the day is rapidly approaching when we shall know what chemical or combination is most destructive of the common forms of infection, and yet practical; then we can apply antiseptics rationally.

This disease is more common in warm cli-

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

mates, and rarely, if ever, heard of in very cold climates; more common in the colored race than in the white, and infants are very susceptible during the first few days or the first week. Before preventive measures were used, nearly half of the negro children in the West Indian islands died during the first three weeks of life from what was known there as eight-day disease, which rarely appears before the first eight days, or allows the child to live beyond the second eight days. After the babe is three weeks old it is less liable to the disease than older persons. The next most susceptible age is from thirty to forty-five years; and in males the infection is more common than in females. This may be explained by the fact that men have their hands and feet injured more often than females. The disease is said to be both traumatic and idiopathic; yet I question if there is a true case of idiopathic tetanus. The traumata most liable to be infected by this organism are punctured or lacerated wounds; and the parts of the body most liable to the infection are the hands and feet. This may also be explained from the fact that the hands and feet are more often punctured or lacerated than other parts of the body. The infection is most often contracted from rich soil—especially a soil rich in decaying vegetable matter or stable manure. When the bacillus enters a wound, it remains at the site of infection, and other parts of the body are wholly free from the microorganism. This fact justifies the removal of the original site of infection or the thorough opening up of it. The morbid conditions produced during the disease are not from the microorganism *per se*, but from a toxin generated by the bacilli, which is absorbed by the system and carried to all parts of the body. This toxin is a toxalbumen, and it is probably the most poisonous substance known. The disease can be produced by injecting the toxin without any of the microorganisms. Yet it takes some time to bring on the morbid conditions, and this has caused some scientists to believe that the toxin itself undergoes further change in the subject when introduced artificially. To give some idea of the virulence of this toxin, it is said to be four hundred times more poisonous than strychnin. After the bacilli have entered a wound or abrasion it is usually about ten days before any of the symptoms of the disease appear. Some cases begin within five days, and others even later than fifteen days. The shorter the time between the inoc-

ulation and the development of the disease, the more severe the attack. So the cases that we may hope to relieve at all are those that develop twelve or fifteen days after the inoculation. The cases that develop during the first week are 90 per cent fatal in the adult, and 99 per cent among infants, with the best known treatment and nursing. While the symptoms may vary in different subjects, yet there is that peculiarity about them that enables us to differentiate them from similar conditions produced by other diseases or drugs. In fact there are, in all cases, signs, symptoms, and usually a history that we have in no other condition or disease. These peculiar symptoms are so indistinct or feeble in some cases as to be overlooked by the physician who has not had some experience with the disease; and he makes a wrong diagnosis from the prominent symptoms he sees in the case. The signs and symptoms of strychnin poisoning, spasmodic hysteria, tetany, and even hydrophobia, may be so imitated by some cases of tetanus as to be mistaken for any one of these at first sight, yet there is always a decided difference if we make a close study of our case.

The following cases have come under my care:

First Case.—Mrs. F., a woman about thirty years old, and an epileptic, had what we might call an idiopathic attack of tetanus, as all my efforts to locate some wound or scar of infection were fruitless. Like most so-called idiopathic cases, it was mild. A peculiar thing about the case was that it so nearly imitated her epileptic seizures during the first twenty-four hours as to be mistaken for this by her husband and friends. Yet upon comparison the two were entirely different, and on the morning of the second day the husband realized this and came for me. The attack lasted some three or four days, and was followed by a recovery. The treatment: Chloral hydrate, belladonna, stramonium, and so on.

Second Case.—A baby, eight or nine days old, was affected, and the case continued twenty-four hours after I saw it, when the child died.

Third Case.—This case was similar to the second one, but coming on about the tenth day after birth, and had the gradual developments so common to this disease, so that I did not see it till a day or two later, when trismus, or lockjaw, was well established, so that the baby could not nurse, and it was for

this that I was called. This case also terminated fatally in about twenty-four hours from the time I saw it.

I might repeat here that trismus nascentium, or tetanus neonatorum, is fatal in 99 per cent of the cases, even under the best skill and treatment known to medical science.

Fourth Case.—A boy eight or nine years old had fallen from the top of a high fence, while attempting to mount a mule, and the fall produced a compound fracture of the humerus about the junction of the middle and lower thirds. The upper segment of the bone stuck through the soft parts and into the ground, which was a rich loam and near the barn. I cleansed the wound as best I could and reduced the fracture, putting it up with the proper splints in a flexed position across the chest. For four or five days we had every reason to believe the case was progressing satisfactorily; there was no swelling, no pus, no inflammation, and little or no pain. The boy slept well and played about with other children, until the evening of the fifth day after the injury, when he complained of feeling drowsy and began to yawn—a symptom that is nearly always present immediately before the muscular spasms of tetanus begin. On the morning of the day mentioned, the boy, in company with his father, had ridden to town to see me, a distance of four and one-half miles, and the father thought that probably the ride to and from town was too much for him, and had caused the drowsy condition. While in this condition, in attempting to get on the bed, the boy appeared, as the mother thought, to strike the broken arm against an iron bedstead, and after taking a short nap he woke up and began to cry and complain of the arm, which the mother thought was due to the blow received in getting in bed. He spent a restless night, waking and crying frequently through the night, and at times screaming out suddenly from his sleep. Early the following morning I was summoned to see the patient, and could discover nothing definitely of the trouble that followed. The conditions present were not unusual, except as to the sudden pain in the arm, of which the boy complained, continuing to cry out every few minutes. As yet no muscular spasm had appeared, save in the broken arm. Occasionally during the pains the patient would grasp the wrist of the broken member with the well hand. I examined the arm, found that the bones were not in apposition, and, as I thought, had been misplaced

by the blow received in his getting into bed. I also thought this want of apposition was the cause of the pain. The soft parts about the injury seemed to be still in good condition, with no pus, inflammation or fever yet present. A physician from a neighboring town happened to be passing through the neighborhood, and I called him in to assist me in chloroforming, etc. He concurred with me in supposing the trouble was due to lack of apposition in the bones. We chloroformed, readjusted the bones, and again applied the splints, putting the arm up flexed as before. Neither of us suspected the true nature of the malady from which the patient was suffering.

After redressing the arm, the patient rested comfortably twelve or fifteen hours. But this was due to the effects of the chloroform rather than from the treatment of the arm, as we at first supposed. The next morning he was still comparatively easy, and the report came in he was doing well. In the afternoon I was in the neighborhood and called by to see him, because I was near, not because they had called me back. I found him again suffering with the arm. Again I found the ends of the bone not in apposition, but past each other, as before, and consequently producing more or less pain by jaggings the soft parts. I also found the tissues surrounding the broken arm had begun to assume an unhealthy appearance, yet the pain and trouble were still limited to the single member, and that part of it where the wound was. I repeated the operation of chloroforming, but put up the arm in an extended position, using long, straight splints, to which the arm was securely bound. Again the boy rested comfortably for several hours, but from the effects of the chloroform, as before. I yet thought the readjustment of the broken parts caused the patient's comfort. The next day I was called again, to find him suffering from tetanic spasms that involved the whole arm and shoulder. The least noise or disturbance would throw him into a new spasm. The soft parts about the broken bone had assumed a darker hue, and bloody serum exuded from the puncture in the skin. I recognized the true nature of the malady, and decided an amputation would be good surgery, as the trouble was limited to the broken arm. I deferred the matter, as I had never heard of an amputation being performed for this class of tetanus. Meantime I called up the physician who had assisted me, and told him what we had to deal with. The next day he

met me at the patient's home, and he brought along two younger physicians, who had never seen a case of tetanus. We all decided an amputation was good surgery for the case, and so chloroformed him the fourth time and took off the arm near the shoulder, or about the middle of the upper third. A slight febrile condition was present at this time, and a slight spasm of the muscles of the shoulder, chest and back. Again the chloroform relieved him for a few hours only. Then the tetanus returned, accompanied by marked trismus and all the graver symptoms of the disease, except the fever, which had disappeared. Within twenty-four hours the patient died from exhaustion and shock.

I fully believe, had the arm been amputated as soon as the attack began it would have been good surgery, and given the patient a much better chance of recovery. I am sustained in this by some of the abler surgeons throughout the county. Yet at the time of performing the operation I did it simply because the conditions, as they appeared to me, seemed to require, or at least to indicate it. At that time I had not found where such course was authorized, but did so later.

Fifth Case.—A young man twenty years of age. A peculiar coincidence of the case was that he stuck a nail into his foot on the same afternoon on which I called to see him. Violent tetanic spasms followed immediately. So violent were these that the patient's friends thought he had suddenly become mentally deranged. On investigation, I found that ten or fifteen days prior to this another nail had been stuck into the same foot, and the wound had healed. Yet the break in the integument showed plainly where the injury had occurred. I looked closely for the redness and tenderness that are said to be present in these cases, in wounds that are healed over an infection of tetanus. Neither was present, so far as I could discover. This was the most violent case I had ever seen, and the slightest touch or noise would throw him into convulsive spasms from the beginning. When I told his friends what the trouble was, they immediately attributed the condition to the nail wound recently received, and I couldn't persuade them to connect it with the former one. I had longed for antitoxin in the case of the broken arm, and had resolved to use it in my next case, and made arrangements to procure it at once. In the last case, I happened at this time to have on hand some veterinary antitoxin, which I had ordered for a

mare having tetanus three or four months previous, and I decided to use it on this young man. At the same time, I ordered from Memphis by long-distance phone human antitoxin.

At the first administration of the horse antitoxin I gave my patient about one-sixth the amount recommended for a horse, and the same afternoon repeated the dose. The next morning, being disappointed at not receiving the human antitoxin ordered, and finding my patient's condition decidedly improved, I again gave the horse antitoxin. That afternoon the other came, but as the patient continued to improve I continued the original treatment. Within eight days the patient recovered completely, being able to go about his work. I used practically nothing else but the horse antitoxin. Had I not used the antitoxin on hand, I doubt if the use of the antitoxin ordered, after it came, would have accomplished much, as it was delayed in arriving one day.

The most effective method of using antitoxin in these cases is said to be by intracerebral injection, or injecting the lateral sinuses of the brain by puncturing the scalp and skull. But this appearing hazardous to me, and being condemned by some reputable surgeons, I did not think it wise to use it, especially in my last case, where I was obliged to use the form intended for horses.

Subdural injection is said to be the next best method of application. Just here I might say that a good way of administering would be by lumbar puncture, the same as is employed in administering cocaine in spinal analgesia. Next is the intravenous injection, and lastly the intramuscular, or hypodermic, injection. This method is by some said to be the best, and, being comparatively safe and easy of application, I selected it in the case last cited as the one best adapted to the circumstances.

The injection of carbolic acid solution, 2 to 10 per cent strong, is highly extolled by some surgeons, and has doubtless been of some virtue; but it causes so much pain and swelling after its use that I have never cared to use it in treating a person. In this treatment the application is to be made every thirty minutes the first day, and less frequently for two or three days following.

The antitoxin treatment is the only one that we accept as possessing any material virtue towards curing the disease, and it is useless after the disease has progressed two or three days. Its greatest virtue lies in its immunizing

qualities. In this field it stands alone as the proper treatment in cases of suspected infection. The physician who neglects it is doing his patient, himself and the profession a great injustice. There has been no case, so far as I have been able to learn, of tetanus after the proper administration of antitoxin for immunizing purposes.

The immunizing treatment is after the following manner:

If there is a suspicion of tetanic infection, give immediately ten cubic centimeters of the tetanic antitoxin hypodermically, and repeat the dose in twenty-four to forty-eight hours. Should there be a case of developed tetanus, use double the quantity, and at closer intervals, beginning as soon as the patient can be reached and continuing so long as the case may last. Do not neglect your other remedies that may give the patient temporary relief, nor the proper surrounding of the patient, such as a darkened room and absolute quiet.

Referring again to the case in which I used the horse antitoxin, I used no other remedies after I began the use of this one. Nevertheless, I looked to the surroundings and comfort of my patient by the externals, such as mentioned above.

I have spoken of tetanus in the human subject only. I may add that horses and mules are very liable to it, and cattle and sheep to a less degree.

As to the idiopathic form of the malady, there is in my mind a question. It is either an infection through some obscure trauma, an infection from the toxin only, or an infection of some toxic material that produces symptoms similar to those of tetanus. These cases usually recover abruptly in a day or two after the attack begins, and therefore are unlike true tetanus. Instead of being acute, they are frequently subacute, and are never so severe or attended by fever. I leave this phase of the question for some future investigator to prove or disprove.

In conclusion, I wish to say that we should discard the term "lockjaw" as being a misnomer and misleading, for many of the cases of tetanus never have marked trismus, or lockjaw, and in many others it comes on during the last stages. I would like to have the physicians present who have had a case or cases of tetanus neonatorum recover report them. They have had something worthy of reporting.

DISCUSSION.

Dr. Dickson—Fortunately for myself, at least, I never had to take care of a case of tetanus, so I must necessarily leave the discussion to those who have had the clinical management of this disease.

Dr. Chestnutt—I wish to speak a few moments on the treatment of tetanus by weak injection of magnesium sulphate, because while serving my interne in the hospital I aided in the treatment of a case by that method which recovered. This case was reported by Dr. Robert T. Miller in the American Journal of Medical Science for December, 1905, and brought out many valuable points in the treatment of tetanus, and also brought out the ease with which the most severe cases may be treated. The patient, a boy, seven years of age, was brought to the hospital on the tenth day after the infection occurred. The history showed that three days previous to that the first symptoms of tetanus had appeared, and these were principally of flexion of some of the muscles of the hand and reflexion of the muscles of the elbow, and slight gnashing of teeth, but when the boy was brought into the hospital he was entirely rational. About twenty minutes was consumed in the examination, and during that time he had twelve distinct convulsions. Along towards nine o'clock that night he was in a marked condition of stupor, and he continued that way. The jaws were firmly locked, and they remained so during the whole period of his disease; for thirteen days they remained locked, and there was no relaxation. We started trying an injection of magnesium sulphate. In speaking of that treatment, I would like to make a few observations as to how this treatment was brought to this country. Melchor, of New York, working on monkeys in 1905, studying the effects of magnesium sulphate, noticed it had several effects. In the first place, if you inject it in small amounts, intravenously, the result of the injection was to cause inhibition of the respiration because of complete muscular paralysis of the entire body. Then he tried a 25 per cent solution of magnesium sulphate applied directly to the nerve, and he found it produced marked paralysis.

The next point he tried was to try a subcutaneous injection of magnesium sulphate. He found in that condition it produced deep narcosis and muscular relaxation. The thought then occurred to him to try injections into the spinal canal by lumbar puncture, and by

doing this the result was complete anesthesia and complete paralysis of the entire body, with the exception of the diaphragm and the muscles of the neck and the head. That is, in other words, all muscles were completely paralyzed except those that had their innervation direct from the brain itself. He suggested at the time that magnesium sulphate might be valuable as an anesthetic, and Flagg, of New York, tried it on several cases, and found that he could do such operations as prostatectomy, or any operation upon the lower extremities, with perfect ease, but owing to the fact that the effect of the anesthetic was much less and less for a great length of time, he didn't think it would be very advisable to carry it on. Melchor, in making these observations, suggested that it might be valuable in the treatment of tetanus. The reasons he had for this, and reasons that are well known and entirely rational, are these: In the first place, in a death from tetanus, there is nearly always asthenia, resulting from excessive muscular contraction, and usually death finally occurs from fixation of the muscles. So, in the strength of the solution to be used in the treatment of tetanus, he has used one cc. of a 25 per cent solution of magnesium sulphate to twenty-five pounds volume of water. In the case of children it is always best to use one cc. of a 25 per cent solution to twenty pounds of water weight. In the first injection given it is of great value to give a little smaller dose than that, because you will find out from experience that it is not wise to go too deep and give too large a dose at once.

So, in treating this boy, in order to make the lumbar puncture, on account of the extreme rigidity, we had to give him chloroform to relax the muscles. A long puncture was made, and we injected between two and three cc. of a 25 per cent solution of magnesium and sulphate. There was, within an hour's time, a complete relaxation of the muscles of the body, except the muscles of the face and diaphragm. There was, of course, no effect there, and the trismus remained. But the boy was comparatively easy during that time. This anesthesia and this muscular paralysis lasted for a period of twenty-four hours. At the end of this time it was necessary to give him another injection, and during the thirteen days eleven injections of this magnesium sulphate were given. In each case it produced the exact effect wanted, but it gave rise at the same time to some symptoms which were truly alarming. The pulse fell considerably five or

six hours after the injection. The temperature rose to quite a height, and then slowing of the respiration began. Melchor, in his investigations, noticed that if too large a dose of magnesium sulphate was used, respiratory paralysis would occur. He suggested in those cases that if the lumbar puncture were made and the spinal canal irrigated with a normal saline solution, the magnesium sulphate in that way would be relieved and the monkey recover all right. In the same way with this child, in the first place the injection we gave reduced this paralysis and everything was satisfactory, and the second one likewise; but on the third day the respiratory rate fell to four and remained so for thirty-six hours. In the meantime preparations were made, if it became necessary, to wash out the spinal canal. We had one interne and one nurse there constantly to watch him, and in about fifteen hours after the injection the rate of respiration began to go up, and by the end of twenty-four hours it came back practically to normal. So this boy was treated in that manner with the injections of magnesium sulphate in an acute case of tetanus with an incubation period of seven days, and one in which the prognosis was so bad that we gave the parents no hope at all of any recovery. But, despite all that, with that line of treatment, we adopted one or two others. We saw that the disease lasted some time, and the question of food came up, and the question of water. It was impossible for the patient to swallow at all, so the method we have adopted is this: We gave him salt solution direct by the Murphy method continuously all the time. We fed him through a small tube passed through his nose into the stomach. We fed him from every three to six hours. We never used at any time any quantity to speak of, because it was felt that in such case as this the tetanus was to last a considerable period of time, and if his stomach failed or if he should vomit after the passage of this tube, asphyxiation might occur, and, together with that broncho-pneumonia, and there would be no hope for him. For that reason we gave him nothing at all that might tyrannize his stomach or stop it. With those lines of treatment, at the end of sixteen days the boy completely recovered. Although all the symptoms of tetanus had disappeared, his arm remained perfectly flexed, showing that the tetanus toxin, which I wish to speak of—Dr. Warren spoke of the absorption of the toxin. It is not so much

the absorption of the toxin; it travels up the nerve sheaths and it affects the nerves going to the spinal cord, and it affects that portion of the cord more than any other, and that's what causes flexion to the arms.

The other point I want to mention is: He referred to the fact that very few cases of tetanus were ever saved where the incubation period was less than from twelve to fifteen days, but here was a case where there was an incubation period of only seven days, and the boy was saved.

And then the question of amputation that comes up. It seems to me that amputation would only do one thing. When the symptoms of tetanus develop, that in itself is proof that the toxin has already united with the nerve cells at the central nervous system, and, having united there, it is impossible, in giving antitoxins, for them to have any effect upon it. So, the effect of the toxin would go right on, whether you amputated it or not; and if you amputated it, of course, no further toxin would be formed. That is a point that has to be borne in mind.

And then, in regard to the infection always being local. That is true. The tetanus bacillus usually remains at the seat of infection, but in reading up a little on this subject last summer I read of one or two autopsies of patients who had died of tetanus, in which it was possible to cultivate tetanus bacillus from the spleen and liver, the heart, and some of the other organs. Of course, that is rarely found, but it does occur.

Dr. Smith (Hot Springs)—I think there is quite a difference in the virulence of the condition and the diffusion. It soon develops after injury. Tetanus is due to the toxin and not to the migration of the germ itself. They are prone to develop in closed factories, but where the room is open and free to exposure, and exhaustion of the oxygen in the atmosphere is replenished by ventilation, the germs cannot thrive, consequently tetanus does not occur.

After tetanus once develops, especially the severe symptoms, I don't believe antitoxin or sulphate of magnesium has much effect, because the injury has already been done—the injury to the nerve centers—and they usually die. My experience has been in septic cases. I believe that prophylaxis is good treatment; probably one injection of antitoxin would prevent a case of tetanus. I believe it should be more often resorted to in septic cases, or where sepsis is likely to occur. These are

more successfully treated by the doctors who have had experience along that line. I think there is a form of tetanus which will probably get well where they have not absorbed enough of the toxin to produce those changes, as that of the nerve centers; They probably go through and recover without antitoxin or any other treatment, provided they don't become too much exhausted. I doubt very much about the effect of the treatment after tetanus has once developed.

Dr. Gibson—I think it is a credit to the State of Arkansas and the Arkansas Medical Society, and I want to put on record my experience in tetanus neonatorum. We have been requested by Dr. Warren to give our statistics. He stated he had a mortality of 99 per cent. According to my experience, it is not a very serious disease. My per cent of recoveries was 100 per cent. I had one case, and that got well. (Laughter and applause.)

Dr. Hoffman—In regard to Dr. Chestnutt's statement, it has been proven by experiments upon monkeys and other animals that the tetanus toxin travels from the infected area along the nerve sheaths to the nerve cells in the cord. And it has been shown that it invariably links itself first to the motor cells, at least in animals, which corresponds with the nerve in the vicinity of which the infection has taken place. Experiments with animals further have shown that if we introduce or inject the antitoxin directly into the structure of the cord, the entrance of the infection can be prevented or the disease baffled, providing the injection is made in time. But after the poison has once reached the nerve cell in the anterior column of the cord and has linked itself in there with the nerve cells, then the treatment with the antitoxin was absolutely of no avail. Some of these experimentors have also tried to determine the time which was required for the passage of the toxin from the periphery to the nerve cell in the anterior column of the cord, and that was variously determined by different observers. They also found out, studying the animals, that the disturbance invariably appeared in that area which was innervated; that is, in that part of the area which was innervated by the nerve which was involved. It was there worked out that we have no symptoms such as are present in the case of man as in the lower animals. Lockjaw did not exist in those animals which were experimented on, while in man it invariably involves some of the cranial

nerves. That is a problem which has never yet been definitely determined or settled.

As far as the amputation of the limb goes, the experiments are against that, because after the poison has once formed it does not travel through the blood stream, it does not travel to the lymphatics along the nerve sheaths until it reaches the cell in the anterior column of the cord; that is, the large motor cells where it links itself. It travels no other way. And the experiments have shown that it requires usually from three to four days for this poison to travel, and after it reaches there it links itself to the cells, and the disturbance begins, and in making reactions they have noticed that it spreads from the motor cell in the anterior wall over to the cells in the posterior column, and brings about an involvement of them. So I can't see how amputation would do any good after the poison has started on its route and linked itself to the nerve cell up there.

As to the effect of magnesium sulphate injections, I am not, of course, familiar with it.

Dr. Chestnutt—The question was brought up by one of the physicians here in regard to the toxin having united with the nerve cell and the damage was done, and therefore there was no chance of recovery. I might say that is the exact reason why we used magnesium sulphate. Magnesium sulphate is not used for the purpose of neutralizing the poison, at all; but it is merely used for the purpose of tiding the patient over for a certain number of days until the effects of the toxin, which has united with the nerve cell, has worn off. It is reasonable to suppose that in this case, after a period of sixteen days, the effects of the poison did wear off, and the magnesium sulphate tided him over, and in that way saved his life.

Dr. Warren—Replying to Dr. Chestnutt, I might have gone into the symptoms and conditions. That is one peculiarity I expect all of you know with reference to the patient always being rational; that is one of the strong points that identifies the disease. Of course, it is the same in strychnin poisoning, except in that he knows everything and does not know it. He spoke of a case he saw. I say, too, whenever that condition exists in an acute case, it goes on until the end, until it terminates one way or the other. If it sets in early it continues, or if it sets in late it continues. As to magnesium sulphate with reference to tetanus, I searched all of my medical journals and found little or nothing to help me out in

a report of these cases, except something with reference to the use of magnesium sulphate. I found by one person that it was extolled and by another condemned, so there I was. I had had no experience with it myself, and I did not use it.

Now, the effect of nourishment is a problem that comes in always where you continue your treatment and they get well. We must always consider the holding up of the vitality of our patient and giving them nourishment after this condition of trismus sets in. Nourishment, then, becomes something we have to administer at regular intervals and do it ourselves or have the nurse do it.

With reference to the mode of travel of the toxin, pathologists tell us it is true it does travel up through the nerve sheath, and it is said that it is more likely to be quick or be of rapid development when the seat of infection is close to the nerve, so that it has to be of easy connection, we would say, to the live wire or to the substance of conduction. But it is also a fact that after this toxin gets into the system it is said to be general. The trouble, of course, is to the nerves and the nerve centers.

He spoke about tiding the patient over. Just here, with reference to Dr. Hoffman's remarks concerning amputation, I could not, of course, from my experience with the five cases I have seen, lay down anything that would probably be of any value to any of you—no more than that these cases were interesting, and I thought it would probably be interesting to report them, as we never had the subject under discussion since my connection with the Arkansas Medical Society. But there is this feature about it: The toxin travels slowly. If it travels slow, we have no proof that it is not being continually produced, at least for a time, and especially in those cases that are of rapid development; so that the excision of the original site is indicated. If you just cut around it a little distance and take out a small particle or small part, it will stop the production of the toxin, so that if there is any such thing as tiding your patient over you have a great deal better chance of tiding him over than you have with the poison being produced and the system continuously taking it up.

An idea that I did not bring out that I should have done, is, if you can sustain and keep alive the patient long enough, nature sets up an immunity or combative force of the organisms of the cells, which overcomes

the conditions. If the magnesium sulphate is any good, that's all I can see that it can be, from Dr. Chestnutt's report of the case that he had. I might say here, too, that one case of any disease does not make a law by which we may be governed, or which is of much value to us as physicians and practitioners. But if there is any disease that we have come in contact with in which one case would give us a cue, it would be that of tetanus rapidly developed, and of a short incubation period; because we know that the statistics are alarming on those cases. So that, as I say, one case might not mean much, but in this particular form it would mean something. Dr. Smith spoke of open wounds. If you open up the wound and thoroughly excise part of the surrounding tissue and let the air there, that helps you to do what you want done by preventing further trouble.

Now, the effect of treatment after development. I know that some cases do get well. I want to say just here that a friend of mine, who is a member of the Frisco Medical Association, Dr. Durringer, of Fort Worth, Texas, got up a report on three cases that he had, two of his own and one of a friend, in which he used the antitoxin early. Two died and one got well. The case that got well was the one in which he used antitoxin early. He also reported some other cases in which it wasn't used that didn't get well. But I want to emphasize the fact that antitoxin is not so much of a curative agent or medicine as it is a preventive. It gives us immunity.

Just here another thing. We do not know and it has never been brought out in anything that I could find whether or not one attack of tetanus gives us immunity against future attacks. That is another thing I meant to bring out in my paper that I did not. But there is nothing said in medical literature about one attack giving immunity from other attacks. Now, I believe it will. That is my opinion, however, and it might not amount to anything.

With reference to amputating, I will say this: If there is any virtue in opening up a wound and excising it where there is an infection, or where the point of infection exists, may not that compound fracture produce your seat of infection, and should you not clean it out? If you can do any good by removing the original site, the only way you could remove it would be by amputation, and it is advised by surgeons of authority. But in my case I want to say that the convulsions

were limited to the arm alone, and it was doing so much damage that the soft parts began to show evidences of degeneration, so that it looked like it ought to be removed before gangrene set in.

With reference to the case Dr. Gibson reported, I had a very interesting report of a case from some English medical journal, where a nurse had gone to St. Elba, one of the western Hebrides, to show the midwives how to treat those troubles by the use of iodoform, and after the use of iodoform was instituted in those islands there were more cases of tetanus developed in the new-born. So that if that was true, the use of iodoform seems to be a very strong preventive agent.

And another thing. I feel this way about it: I have looked in vain for any case of tetanus neonatorum to recover. If you have one, don't hesitate to report it. I expected that I would probably hear from the Arkansas Medical Society some report of a case that had gotten well, because I thought that if they got well anywhere they would probably do so under the treatment of our world-famous Arkansas doctors.

THE OFFICE TREATMENT OF THE MORE COMMON DISEASES OF THE RECTUM.*

(C. P. Meriwether, M. D., Little Rock.)

If there is one point I would like to make in the treatment of rectal diseases, it is, first of all, examine your patient and find out for yourself the nature of the trouble. There is no part of the body where the patient so often makes his own diagnosis, and no condition where the physician so often accepts it.

Rectal diseases are liable to progress very rapidly, and carelessness in diagnosis often allows simple conditions to become serious, besides the discomfort and suffering the patient is forced to bear. Often a small external hemorrhoid is smeared over with an ointment, later becomes ulcerated, septic, finally terminating in an abscess, rupturing into the rectum, forming a fistula. The patient now has to undergo an operation, and several weeks must elapse before he is well. Had the condition been recognized in your office, and had you explained to him how easy you could relieve the trouble without pain, by injecting a 1 or 2 per cent solution of cocaine

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

around the tumor, you can then lay it open, turn out the clot, pack with strips of iodoform gauze, quite tight, for the first time, and dress with a callodian dressing for twenty-four hours, your patient would be well in three or four days, and free from pain from the turning out of the clot. This form of piles, if seen early, before any inflammatory condition arises, is entirely without the action of the sphincter.

INFLAMMATORY EXTERNAL HEMORRHOIDS.—These are always very painful. If large the mucous membrane will be pulled down from within the rectum, forming parts of its covering. They either ulcerate and slough or terminate by subsiding and forming the so-called skin-tab. The treatment is in subduing the inflammation, or the radical operation. Tuttle claims that one method relieves the pain as well as the other, while in those who are treated locally you have the skin-tab left, which is likely to light up again, but this can be cocaineized and clipped off at any time. Applications of cold "ice bags" or hot packs of mild antiseptic solutions, or, if only one tumor, they may be removed under cocaine.

TREATMENT OF INTERNAL HEMORRHOIDS.—A great deal may be said upon this subject, but I am not going to say to you that the palliative treatment is better than the more radical. Internal piles may mean much or little; they may exist for months, or even years, with little or no discomfort to the patient, with a slight or copious hemorrhage. Unless it becomes ulcerated, strangulated or engaged in tight spasmodic sphincter, there is no pain from an internal pile. The sphincter, from continual irritation and spasm, becomes hypertrophied, and later a general relaxation, with the prolapse of tumors, and often the bowels. Palliative treatment in these cases that could be radically cured by operations is not considered conservative surgery when the danger is so slight. There may be conditions in which the operation is contra-indicated; then again the patient may refuse, or prefer to try palliative measures first, while you tell them that hemorrhoids are likely to recur after palliative treatment. We also know that many patients treated by this method have no recurrence for years, and some never have any. It is due more to the refusal of the general surgeon to use palliative measures properly that a large majority of these cases are going to the irregulars. I will not go into the details of palliative treatment of

internal hemorrhoids, but more to the methods of a radical cure without a general anesthetic. Gradual dilatation, in the more minor degrees, when you have a tight sphincter, will cure a great many of these cases, especially if followed by cold water injections and bowels kept in proper condition.

ELECTRICITY IN THE TREATMENT.—Heiswanger claims in those cases more chronic, with a relaxed rectal wall, that it is almost impossible to have a prolapsus of the rectum after the first treatment. He uses a special copper electrode, covered by chamois (to prevent its sticking), the positive pole to rectal electrode, negative to a large pad over abdomen; ten to fifteen milliamperes for ten minutes every second day.

Guillemot claims good results from high frequency in acute hemorrhoids with tight sphincter, and by the use of a special cone-shaped electrode, designed by Daumer, you are able to dilate the sphincter, taking advantage of the anesthesia produced by the high frequency current.

I would next speak of the injection method, which for a number of years was entirely in the hands of the "quack," but is now being used by some of our most noted rectal men. Kelsey's attitude caused a great prejudice against it. He treated and reported over 200 cases with satisfactory results, then had two or three accidents and condemned the method; but since the method has become better known and the class of cases in which it is applicable have led many to give it a trial, and most reports are satisfactory. It is to be used only in internal piles, and in those that can be brought into view and made surgically clean.

Tuttle claims the size of the hemorrhoids is no contraindication to this method of treatment, so long as they collapse when pushed up into the rectum. Mixed hemorrhoids, and those complicated by fissure, or spasmodic sphincter, are not good cases for injection. There are two distinct schools in the injection treatment; one uses a very strong solution in large quantities, causing a sloughing of the tumor, while the second uses a weak solution, which causes an inflammatory induration and choking of the circulation, which is followed by a shrinking and atrophy of the pile, without ulceration and sloughing. I can see nothing to be gained in using the stronger solution, for the patient would suffer more pain and be left with a large ulcer to heal, so if we wish to remove the tumor, do it surgically. If we can eradicate the hemorrhoids without pain,

sloughing, ulceration or confinement, it will be a great improvement over operative measures. This is what is claimed for the second method of injection, and in properly selected cases it is believed that the claim can be substantiated. The patient should be just as carefully prepared for injection as for any nic, you can find it in any work on rectal diseases. I have treated two cases recently by injection, both very satisfactory to the patient and to myself.

DISCUSSION.

Dr. Willis—I fully agree with Dr. Meriwether, as to the first step, especially, and that is a thorough examination. When these cases come to our office we ought to be sure what the trouble is. We frequently have patients come in and tell us they want something for hemorrhoids. You speak about an examination, and they say, "Well, I am in a hurry; you just fix me up something." I think the physician should always insist on making a thorough examination. You find some of these cases who think they are suffering with hemorrhoids who have a rectal fistula. You find some of those cases who think they are suffering from hemorrhoids who have a fissure. So I think the first thing every physician should do is to make a thorough examination. First see what the conditions are, and then meet those conditions. Our later textbooks give us a great many good plans for treatment. I have enjoyed this paper very much, and most heartily indorse it.

Dr. Cox—There is one important point, and I think Dr. Meriwether made it, in making a plea for the examination of our patients when they come to see us with symptoms of any rectal trouble. It was my privilege nine years ago, I believe, before the Tri-State meeting in Memphis, to make this same plea. If we examine our patients, the trouble can be readily ascertained and easily treated, with satisfactory results to the patient and to the physician.

Dr. Dorr—I want to emphasize one point with regard to diagnosis. You have complications. Uncomplicated hemorrhoids don't produce it. You either have fistulæ or ulcers there. If a patient comes to you, look out for something besides hemorrhoids—either ulcers, fistulæ, or something else. It is almost always a complication that produces these symptoms.

Dr. Smith (Hot Springs)—I heartily concur with Dr. Meriwether in the diagnosis, thor-

ough examination, and recognizing the condition and treating accordingly. If I may be permitted, I would like to speak a little more along the line of procedure for hemorrhoids, and then go a little further into stricture in the rectum. In fact, I would like to speak of the operation for stricture, which, I think, is not described in any textbook. But, to deal with hemorrhoids first, my opinion is they can be successfully treated at the office, radically; anesthetized locally and incised—not with clamps or ligation. They do more mischief than the hemorrhoid itself. If it is necessary to operate upon it at all, I think it should be freely incised, and at the same time dissected out and tied off. Breaking up of the hemorrhoids is possible, and the more we disturb the complication, the less likelihood of subsequent hemorrhoids. In paralysis, instead of being clamped off, they should be incised and the tissues brought together in perfect apposition and sewn together in the axis. These are important things. If clamped off or tied off, the hemorrhoids produce scars which favor ulcers, favor fissures and favor fistulæ. There should be as little scar tissue as possible in an ideal radical operation. I believe the scar should be left on the outside of the rectum, outside of the mucous membrane. My plan is to incise at the junction of the integument with the mucous membrane, running the dissecting knife down carefully, not disturbing the sphincter muscle, getting to the hemorrhoids and tumors and dissecting them off, and sew up this around the margin of the integument of the mucous membrane. All of the scar is outside of the rectum then. Getting to these strictures, I want to say, first, that not all strictures are favorable for operation. But if favorable for this operation that I am going to describe, they can be very successfully treated. As we very well know, the cicatricial tissue of the stricture consists of fibrous bands running across of the lumen of the gut. By dilating the interstices too much, and breaking those up, we increase the scar tissue and make our stricture even worse. My method has been for fifteen years, in selected cases, you understand, because I want to qualify that, there are some cases not suitable to an operation by this method. By introducing the speculum, or, if the gut is too small for that, by introducing the finger, and passing the knife up alongside of the finger, but I am careful not to distend the tissue enough to break any fibers of this stricture. I make a free incision

through the fibers of this stricture and follow it, going down gently with my finger, or by observation with the speculum, until I have divided the fibers of the stricture on the axis of the gut. I now stretch this tissue enough to make this scar, now a transverse scar, and sew it up in that line. I have perhaps made an incision one-half or three-fourths of an inch. You must be guided by your judgment in estimating how large you want to make the incision in the lumen. Suppose we cut out one-half an inch for a small stricture, when we get that transverse cut we have increased it something like one-half an inch. You can then make the lateral one. I usually make the first cut in the median line posteriorly, then I can make the lateral one on the side, about half an inch, and I have increased it by from one inch to an inch and a half. Considering that I have only cut one-half an inch incision and have increased it to an inch or an inch and a half, you can very readily see that when you have increased it and made three-quarters of an inch, or even an inch, you have made very little disturbance to your stricture. You may have tight rectal stricture. Then there is no method of getting rid of it other than by dissecting out that section of the bowel and bringing it down and attaching it to the external integument. I have had more success with the condition of stricture than in any other condition. I don't think this procedure is described in any of the textbooks. It is submitted for your consideration.

Dr. Jelks (Memphis)—These subjects are, of course, interesting to the proctologist. As to diagnosis, none of us, not professing to practice proctology, examine our patients in rectal diseases too closely. Many of us don't examine them closely enough. Many of us don't examine them at all. That's wrong. If you have a patient who comes in with rigors, and you don't know whether it is malaria or typhoid, you get a specimen of the blood. Why not do so with rectal surgery? You may have hemorrhoids or you may have something else. If you have hemorrhoids, you have pathology, and that pathology is within itself a distinct feature, or you would not have all these dilated and diseased strictures. Further, as to diagnosis. When a patient comes into your office or is referred to you for examination, and that patient admits his condition, more or less serious, of course, you examine him and you may find a stricture in that bowel, and you may consider it malignant. I

had a similar case to that recently. I feared, because of the man's age and of his apparent physical condition, that that man had carcinoma, and so advised him, but at the same time asked the physician, Dr. Gray, who brought him to me: "I have been unable to find any microorganisms which may account for the pus, mucus, and the symptoms and the loss of weight in this case. Have you used any treatment?" "Yes, I have. Having heard your reference to the formalin, I have been irrigating with formalin and boric acid for mucus hemorrhoids that he appeared to have for the last year or two." I said for him to bring that patient back in three or four days, and I found the cause. The enterameba histolitica had been in that man's bowel for years, and he had been having his troubles. The diagnosis had not been made microscopically, as it should have been; but, then, they are not always so easily made of rectal conditions. As to the operation for hemorrhoids, there are many of us who may have our select operations on selected cases, but I must right here raise my voice in opposition and objection to anything that you cannot confine, that you don't know the extent to which you carry your cautery. I have reference to the carbolic acid and other injection methods. They do an infinite amount of harm. I have unfortunately known of so many fatalities in my own city. I have known of two fatalities, one in this state, one of your leading physicians in this state, and I was present when that case was injected. I have seen and known too many of such cases. A person having a hemorrhoid operation should not die. A hemorrhoid operation is too simple; it is too easy.

So far as your operation for external piles is concerned, why, I cut them off and suture them. They are not going to bleed or give you any trouble. If it is internal piles, you don't have to give your patient an anesthetic. So I must raise my voice in opposition to the injection method for hemorrhoids. If you want to try the carbolic acid, you may; but I will never admit that it is scientific or radical. With reference to the two fatalities, I just want to state that one of these cases was operated on by a supposed proctologist—one who practiced proctology.

Dr. Reagan (Louisiana)—I believe that there ought to be an almost unanimous pronouncement against the injection treatment of hemorrhoids. I think the simple surgical treatment, meeting the conditions, is more satisfactory. There is less risk in every way,

and any man who can do the one can do the other. I don't think there is now any good reason why the injection method should be resorted to at all, in any case. There is no case that could be treated by injection that could not be just as well treated by a simple surgical procedure, whatever might be appropriate for the occasion, and certainly a great many very harmful effects would be avoided.

Dr. Meriwether—There is nothing much that I wish to say in closing this discussion, except to dwell upon the fact that in using the injection method we are doing it in order to keep our patients from getting away. There is a big per cent of people that are going to the irregular, quack pile doctor. You all know that. I had it specially impressed upon me a few months ago in Little Rock. The pastor of one of our leading churches came to me and asked me how I treated hemorrhoids. I said it depended entirely upon the nature of the hemorrhoids. He said, "Do you use the injection method?" I said, "No, I do not." He said, "Then you are not the man I am looking for." He said, "I was operated on five years ago in St. Louis by one of the leading surgeons, and had the hemorrhoids ligated. I was in bed three months from ulceration. About a year later I developed hemorrhoids in another portion of the bowel, and then had them clamped and cauterized. I was burned all over the buttocks." He later on, through the solicitations of one of his friends, went to a quack. He was injected. He didn't even go to bed, or anything of the kind; he had no trouble. At the time he came to me his wife was suffering from hemorrhoids. I noticed in the next morning's paper where she had gone to St. Louis to be treated. She came home in about two weeks. A little later I met him and asked how his wife was. He said: "Well, she went up and had the hemorrhoids injected twice, and the place is entirely well." Now, I have known personally of ten cases that went to St. Louis within the past year, and have all been injected for the hemorrhoidal trouble and allowed to go on and attend to their daily business, going around over the city, and none of them had more than two injections. It simply opened my eyes to the fact, and I have injected two of those cases, and, I want to say to you, with the most favorable results. Now, we base our ideas on the injection method mostly on the report made by Andrews several years ago of the Mitchell method—the man who originated the injection method of treating these piles.

He sold that to a veterinary surgeon, who went out over the country injecting everything he came across, without any regard to the nature of the trouble. In 3,304 cases in which he got complete data, there were thirteen deaths. Now, that is a loss of one-half of 1 per cent. How many laymen who had never done a surgical operation would go in and operate upon these cases, surgically speaking, and lose less than one-half of 1 per cent? Some of the best men have lost cases from hemorrhage following operation. I was in New York a few years ago when a very noted surgeon operated on a fistula, and if it had not been that someone else discovered the fact several hours later, the patient would have died from secondary hemorrhage. In those cases that have been injected that resulted in death, I would like to ask whether a postmortem was made. We know a certain per cent of people fall down and die on the street. To claim these patients died from this method without a postmortem examination is very much like the idea of dying under an anesthetic.

Dr. Jelks—I saw those men just before postmortem would have been performed. We found a little pile by the side of a large gangrenous protruding mass of perineal structure; all of the perineal structures were sloughing. This gangrenous mass stood out in bold relief, with the little pile sticking out alongside of the one that had been injected.

Dr. Meriwether—That is the very point I am trying to make—inject your tumor and not the surrounding tissues. That hemorrhoid Dr. Jelks speaks of was not injected. It was injected into the tissues away from the hemorrhoid. Because, had it been injected into that hemorrhoid, it would never have stood off as a little pile by the side of a gangrenous mass.

CONTROL WORK IN BOVINE TUBERCULOSIS.*

(W. Lenton, Veterinarian, Arkansas Experiment Station.)

I have dealt with this subject not as a scientist nor adding the results of personally conducted experiments to the sum of knowledge on the subject, but as a practical sanitarian, weighing the evidence produced by scientific experiments and then working in the application of such salient features as commend themselves on account of their practical usefulness in combating the disease.

Bacteriologists recognize three more or less distinct types of the bacillus tuberculosis—the human, bovine and avian, but, neglecting the last as of minor importance as a factor in control work, there seems

*Read before the Washington County Medical Society at the October meeting, 1909.

to be a very wide difference of opinion as to whether or not the morphological and cultural differences of the other two types, human and bovine, are not rather differences due to environment more than to any original difference in the germs themselves. Dr. Dinwiddie, in a paper read before the American Medical Association, shows, as the result of his experiments, that the tubercle bacillus from the pulmonary lesions of cattle are identical morphologically with those of human sputum, and that in inoculations of hogs and sheep with bovine tubercle bacilli the short or bovine type is not preserved. He also states that in culture the two types are not readily distinguishable under the microscope. Other authorities are at variance with the foregoing, so, as a sanitarian, I leave that part of the question to be worked out by further experiment.

One point seems to be certain—that the relative virulence for animals (except, perhaps, the monkey, but I am dealing only with the domestic animals) of the bovine type is greater than that of the human type. This is an important point, and, although the converse is difficult to prove (that the human type is more virulent for humans), there is some very good evidence pointing in this direction, to which I will refer later.

Koch's assertion that the two diseases were distinct, and that intercommunicability was impossible set at rest the grave fears of the world on this point, but since that time many investigators have worked on this problem, and have deduced such a mass of evidence against his statement that even Koch himself has practically declared himself as agnostic on the point.

Although the question of intercommunicability is still debatable, there are very few scientists who hold to the idea that it is not communicable.

Apart from this phase of the question, the veterinary sanitarian is confronted with the dollars-and-cents aspect of the case in its relation to dairymen, cattlemen and hog raisers, and, even if no danger to man were possible, the enormous financial interests involved would be sufficient to force along the fight against tuberculosis in the domestic animals.

Although tuberculosis may occur in practically any animal, the ones that we are mainly interested in are those most susceptible to the disease, and at the same time those that are interdependent on one another for the means of livelihood, viz., human beings, hogs and cattle.

Dr. Albin Burkhardt, out of 1,452 human cadavers examined, found that 91 per cent showed lesions of tuberculosis regardless of the cause of death; Nageli, out of 500, found 96 per cent, and Schlenker, out of 100, found 66 per cent. These figures, supported by other investigators, show that very few human beings are exempt from the disease. Now, it hardly seems reasonable that so large a percentage of us are exposed to tuberculous people, and the only inference that I can draw from these figures is that the infection must have come from the ingestion of tuberculous animal products. The fact that these cases were not suspected until revealed by postmortem examination and that other causes were responsible for death seems to point to the conclusion that the virulence of the bovine type is less for the human being—the converse of which has already been demonstrated. Now, why should I suppose that the chances of being exposed to the bovine type are so much greater than those of being exposed to the human type? There are enough human patients, and these have no doubt been responsible in the past for spreading the disease to a very great extent, but, although much can yet be done in the education of human tuberculosis patients, I believe that our habits of life and our system of sanitation, imperfect as it is, prevents anything like 90 per cent of us becoming infected through this agency. But, on the other hand, 100 per cent of us

use animal products as food in one form or another—meat, milk, butter or cheese—and all of these can be carriers of the disease. I will disregard the question of meat as an infective agent, for, although in the United States meat inspection does not apply to all animals slaughtered, but only to those intended for interstate or export shipment, the dangerously infected meat would, in nearly all cases, even without any inspection, be discarded, and, at least in this country, the danger would be still further minimized by the fact that the meat is cooked. Of course, in countries where this is not the case, meat is a more important factor. In my estimation, milk and milk products constitute the chief source of danger. In Denmark, a great dairy country, 40 per cent of the animals tested in 1894 reacted. In the United States the data is very fragmentary, but of those tested in Massachusetts, 50 per cent reacted. Investigators have demonstrated that the tubercle bacillus in milk is; of very frequent occurrence, although the udder is free from the disease. At first this was rather puzzling, but in the light of Schroeder's experiments it becomes quite easy of explanation. Discharges from the pulmonary lesions of cattle are coughed up as in the human patient, but, instead of being expectorated, the infectious material is almost invariably swallowed, and microscopical examination and inoculation experiments demonstrate that the feces of such tuberculous animals contain the tubercle germs. A cow of average size passes about thirty pounds of feces daily, and if the small fraction of a grain necessary to inoculate a guinea pig contains enough bacilli to produce the disease in that animal, what enormous quantities of the germs must be passed daily!

Now, referring to another class of investigation, conducted by the United States Marine Hospital and Public Health Service, we find that out of 172 samples of city milk examined, 121, or 70 per cent, contained a sediment consisting in part of cow feces. There lies the trouble. Dried fecal material is plentiful enough in the average cow stable—on the cow, on the stable fixtures, on the clothes of the attendants, and in the air; and under average conditions it is absolutely certain that some of this (not enough, of course, to show except after long standing or centrifugalization), must get into the milk, so that the milk from a perfectly healthy cow may contain tubercle bacilli by infection from minute particles of fecal material from tuberculous cows in the same stable. Where the milk is taken to central skimming stations, each patron taking back to feed his calves and hogs his pro rata of the skim milk from a common vat, we have an absolutely ideal arrangement for the wholesale distribution of the disease. One tuberculous animal on one farm can in this manner infect every cow on every farm taking milk to that creamery. Also, every human being using the products of that creamery is exposed to infection. Experiments have demonstrated that butter made from tuberculous cream contains the germs, and that these are alive and virulent after 180 days; how much longer has not been determined.

Gentlemen, can we wonder that 91 per cent of us carry the lesions of tuberculosis? My only wonder is, how on earth the other 9 per cent escape infection. If the bovine type is responsible for this large percentage of human infections, we are certainly to be congratulated that its virulence is less (for the human) less than that of the human type. Probably the resistance of adults to this class of infection is very great, but how about infants and young children, the greatest consumers of milk? How many of these are lost as a direct result of tuberculous milk? Adults usually take milk in its raw state occasionally, but the bottle-fed baby is dependent on it entirely for food.

I'm afraid I have wandered somewhat from the subject of this paper—control work.

To those who have examined the question only superficially, and from a theoretical standpoint, the solution or the difficulty is simplicity itself: Compulsory testing; slaughter of reactors; disinfection of stables and premises, and then freedom from the disease. Would this be possible? If so, then it would justify even the enormous financial loss entailed; but the limitations of the tuberculin test would naturally render this plan inoperative.

Bovine tuberculosis is a disease of slow development, and, except in the last stages, the clinical evidence of its presence is practically nil, so that to detect its presence we have to resort to the tuberculin test.[†] Now, animals that are far advanced in the disease—i. e., that already have their systems saturated with the toxins—do not show the reaction, having acquired a tolerance for the product. Then, again, there would be little, if any, reaction from animals during the incubation stage, which varies within very wide limits, so that one general testing would not suffice, even would it be possible to control the movement of all animals during the test. Apart from these difficulties, we sanitarians know from experience that methods of compulsion involving financial loss to owners, even though backed by the law, are met with all sorts of clever subterfuges and evasions to render the tests negative and to prevent financial loss to themselves. In states where compulsory testing was started, the owners of cattle soon "caught on" to the idea of acquired tolerance to tuberculin, and a few days before the tests were made injected a large dose of the product into their animals, thus making the tests show a clean record in their herds. Unscrupulous owners now resort to even better methods than this: After the injection of the tuberculin by the inspector, they privately take temperatures before the inspector makes his round, and any animal showing a suspicious rise in temperature is given a heavy dose of some antipyretic, sweetened and mixed in a little bran. This is licked up without any fuss or excitement such as would occur on drenching the animal, and of course the chart of that animal shows nothing to indicate that it is tuberculous.

To my mind, the only really practical method of dealing with bovine tuberculosis is by the method called after its inventor, Prof. Bang, of Copenhagen, the "Bang" method. This method is based on the fact that only exceedingly rare cases of tuberculosis are congenital; very few calves are born tuberculous. If these calves are removed at birth from their tuberculous dams and raised on sterilized milk, they will grow into tuberculosis-free cattle, and as the old cows die off they are replaced by their non-tuberculous offspring, and in a few years the whole herd is free from the disease without very much direct loss. Prof. Bang's method applied in Denmark has shown its efficiency.

In the year ending June, 1894, 40 per cent reacted. In the year ending June, 1904, 16.2 per cent reacted.

[†]The tuberculin test consists of the injection of a small amount of toxin resulting from the growth of bacillus tuberculosis in glycerinized bouillon. The bacilli are killed by heat, and the product filtered and standardized. The injection of a suitable amount has no effect on a healthy animal, but intensifies the symptoms in a tuberculous one, causing a rise of temperature and other manifestations.

Thus, a period of ten years shows a decrease which gives promise of ultimate success. In practice, many disappointments are met with, and Prof. Bang admits that the stockmen of Denmark get discouraged when, in spite of their double trouble in maintaining two separate establishments for the sick and healthy, the disease still hangs on; but encouraging and educating in the small but all-important details, such as are despondent, and bringing to bear the arm of the law on those who are willfully evading their responsibilities, the veterinary authorities are slowly but surely eliminating the disease from the dairy herds of Denmark.

To apply this method, we must, of course, know what farms are affected, and that seems to bring us around to the tuberculin test again, with its limitations and drawbacks; but there is a quicker method, and one entailing but a very small fraction of the expense of a general testing to determine the location of disease farms with tuberculous cattle. The majority of hogs marketed find their way to the large packing establishments, where United States meat inspection is maintained. The hog, as has been shown, is highly susceptible to tuberculous, and, whether fed waste milk products or fattened "behind cattle"—i. e., on droppings from corn-fed steers—it will most certainly become tuberculous if the cattle are so diseased. Now, if each state would adopt a method of tagging, the hog, when slaughtered at the packing house, would bear on its tag evidence of its origin, and it would be a comparatively simple matter for meat inspectors to note the tags on all diseased animals killed. Reports could then be sent in to the authorities of the state where the hog originated, and the particular state could, by reference to their tag records, immediately tell from which farm the tuberculous hog came. Then, of course, the tuberculin test would be invaluable to determine the extent of the disease on that farm. In this manner, practically every tuberculous farm could be listed within twelve months, whereas to test a whole state with tuberculin would require an immense force working for several years. The first step in the eradication of the disease is the knowledge of its extent and location.

One more method, and I have done. Von Behring, the famous German bacteriologist and the discoverer of diphtheria antitoxin, which has revolutionized the treatment of that disease, discovered, in 1902, a substance which he called bovine vaccine, and in 1903, after some successful experimental work, he made the sweeping assertion that "the entire suppression of bovine tuberculosis is now only a question of conscientious and properly conducted protective inoculation, and, of course, also a matter of time."

The cost of this vaccine is \$2.50 per head, and the product is made by standardizing an attenuated culture of human bacilli tuberculosis and injecting one unit (.004 gms.), and in three months five units. This has not given the results hoped for, and the method is at present too costly and not effective enough for general use, to say nothing of the possible dangers, especially for humans, attending its use.

Upon last analysis, we must surely find that no one single method, or even combination of methods, will be successful until the people are educated to understand their responsibilities in the matter.

When all are educated sufficiently, the millennium will be at hand, and tuberculosis, both human and bovine, will be a thing of the past.

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Editorials.

PHILANTHROPY RESENTED.

In the time of the civil war a pamphlet entitled "The New Gospel of Peace" acquired some vogue in the North. In it the Conservatives ("Knsuvvativs") were defined as those who, when they had fallen into hot water, would suffer no man to pluck them out, lest they be scalded. Perhaps some such definition might be applied to the few good souls in the South who at the present time express resentment at Mr. Rockefeller's establishment of a commission to work for the extermination of the hookworm disease.

These supersensitive persons must be few in number and possessed of little influence, for the people of the South are men and women of sense, and they know that improvement of the health of any part of the country is of benefit to the nation as a whole. They know, moreover, that assistance in sanitation is offered to them from the kindest of motives and without a shadow of imputation. They have

some peculiar problems to struggle with, and we feel sure that they will welcome coöperation, even if it comes from a distance.

In the task of rooting out such a disease as uncinariasis it will be necessary to spend a good deal of money, and the establishment of a large fund for the purpose is sure to aid powerfully in the undertaking. After all, the people of the South will themselves have to do the greater part of the work, but there is no reason why they should hesitate to recognize the community of interest felt in the North as in no way derogatory to their own section. Such recognition is sure, we believe, to be accorded, and the coöperation accepted in the spirit in which it is meant. A sure indication in that direction, we take it, is the attitude of the people of the South toward the work of a general educational board that we all know of.—New York Medical Journal, November 13, 1909.

EXTRACT OF CORPUS LUTEUM IN DISTURBANCES OF ARTIFICIAL AND PHYSIOLOGIC MENOPAUSE.

Morley, in the November number of the Journal of the Michigan State Medical Society, reports his results in eighteen cases. This report is a continuation of the one that appeared in the August number of the Detroit Medical Journal. The author used an extract made from the corpora lutea of beef ovaries rather than an extract of the entire ovary, as the consensus of opinion seems to be that the internal secretion of the ovary is produced by the yellow body. The extract is given in five-grain doses, three times a day, one-half to one hour before meals. His results may be summed up as follows:

Five were cured, twelve were improved, and one obtained no relief. Included in the twelve cases that were improved are grouped those that are still taking the extract. A permanent cure may result in a few of the cases under treatment. Of the eighteen cases, fourteen suffered from disturbances of operative or artificial and four from those of natural or physiologic menopause. While the results obtained in so small a group of cases do not warrant the drawing of any definite conclusions, still the author thinks that the results are favorable enough to justify a continuance of the treatment in other cases where there is a disturbance incident to artificial or physiologic menopause.

WASTE OF CHILDREN'S LIVES.

ABOUT 200,000 DIE ANNUALLY FROM PREVENTABLE DEATH CAUSES.

Washington, D. C., Nov. 2, 1909.—American race waste—more serious than race suicide—is pointed out in Census Mortality Bulletin No. 104, in which it is estimated that annually in the United States from 100,000 to 200,000 babies under five years of age die from preventable causes. This great loss of life among the little ones at the period when they are most loving and most lovable could be prevented, is the opinion of Dr. Cressy L. Wilbur, chief statistician for vital statistics of the Census Bureau, who prepared the bulletin, on the basis of present-day knowledge of sanitary measures. For the accomplishment of effective preventive work in this direction Dr. Wilbur holds that the prompt registration of all births and the more careful and precise statement of causes of death by physicians are essential.

In analyzing and comparing the totals obtained in the compilation of transcripts of death returns received for the year 1908 by the Census Bureau from the entire death registration area of the United States, as set forth in the bulletin, those for age periods show a somewhat increased per cent of deaths of infants under one year for 1908, although the ratios for each of the individual years from one to four are identical for 1907 and 1908. Of the total number of deaths, 691,574 returned for 1908 from the entire registration area, it is stated in the bulletin that nearly one-fifth were infants under one year of age, and over one-fourth of children less than five years of age. It is declared that the brute force of the figures representing the actual deaths is more impressive, however, than any ratios or than the rates of infant mortality, even if the latter could be computed in the absence of proper registration of births. Here are the figures:

More than one-eighth of a million babies under one year of age, and fully 200,000 children under five years of age, died among about one-half of the total population of the United States in the year mentioned. It is considered probable that fully 200,000 more died in those cities and states not included in the Census Bureau death-registration area. In this connection, Dr. Wilbur quotes Prof. Irving Fisher's conclusion that of all the diseases of infancy having the median of one year, 47 per cent may be prevented, and that of the diseases of childhood having the median of two to eight years, 67 per cent may be prevented.

"It does not seem unreasonable," Dr. Wilbur states, "when we consider the fact that there is apparently no reason why infants, if properly born, and this means simply the prevention of ante-natal disease and the improvement of the health and conditions of life of their parents, should die at all in early infancy or childhood, except from the comparatively small proportion of accidents that are strictly unavoidable."

The bulletin continues with a statement that the general death rate of a country is largely dependent upon its infant mortality, because the death rate of infants and young children are high, and they affect a relatively numerous element of the population. Exact study of the incidence of disease upon infancy and childhood is most important, and it is imperatively necessary that there should be more effective registration of births throughout the United States for this purpose. The extremely important rate known as "infant mortality" is the ratio of deaths of infants under one year of age, not to population, but to the number of children born alive during the year. This most important ratio should be readily available for the comparative study of deaths

of infants in all of our states and cities, but, the bulletin states, in the great majority of them, unfortunately, the registration of births is worthless, and ratios calculated upon the returns would be deceptive and unreliable.

"The possibility of great saving of human life during infancy and early childhood is emphasized by the estimates made by Prof. Irving Fisher, on the basis of independent medical opinions, for his report on national vitality of the National Conservation Commission, as to the 'ratio of preventability (postponability),' that is, ratio of 'preventable' deaths from cause named to all deaths from cause named for certain diseases of early life.

"Out of every 100 deaths that occur from each disease in which the medium age at death is under five years, there could be prevented the following numbers: Premature birth, 40; congenital debility, 40; venereal diseases, 70; diarrhea and enteritis, the most important cause of infant mortality, 60; measles, 40; acute bronchitis, 30; broncho-pneumonia, 50; 'croup' (which means diphtheria), 75; meningitis, 70; diseases of larynx other than laryngitis, 40; laryngitis, 40; diphtheria (under its proper appellation), 70; scarlet fever, 50.

"Other diseases especially fatal to infants and children would perhaps show equally great ratios of preventability. They do not appear in the above list because their median ages are above the limit chosen, or because, as is the case with 'convulsions,' they are grouped with other and incongruous causes.

"The possible saving of life for 'general, ill-defined and unknown causes,' including 'heart failure,' 'dropsy' and 'convulsions,' median age thirty-five years, is 30 per cent. The median age of 'convulsions' alone is less than one year, and it is probable that at least the ratio of preventability of diarrhea and enteritis (60 per cent) would apply to it. The term is an indefinite one, being expressive merely of the symptoms attending the true cause of death; nevertheless, no fewer than 6,450 deaths were compiled therefrom for 1908, although, in compilation, any other definite cause is preferred. The term is no longer employed by well-informed physicians in reporting causes of death, and it is possible, by inquiry made by the local registrar immediately after the receipt of this and other unsatisfactory statements, to practically eliminate them from the returns, as has lately been done for Chicago.

"In the light of the figures quoted above it would seem that practical sanitation has only made a beginning in the work of preventing the occurrence of infant and child mortality. The ground has only been scratched over. Deep stirring of the soil and thorough cultivation of all the means available, with our present scientific and medical knowledge for the guarding of young human lives, would produce startling results. Public health, as a function of government, is itself only a creation of the middle part of the last century, dating from the utilization of the knowledge available as a result of the operation of the English laws for the registration of vital statistics (1837). Even in England, however, no systematic efforts have been made until very recent years to utilize to their utmost possibilities the facts already known. The infant mortality of England was higher for the years 1896 to 1900 than for the years 1861 to 1865, and no marked reduction in the early rates occurs until the present decade.

"It is time that greater attention be given to the subject in the United States. The prompt registration of all births and the more careful and precise statement of causes of death by physicians are essential. Such terms as 'convulsions,' 'marasmus,' 'debility,' and the like, should no longer be tolerated when the true cause of death can be determined."

News Items.

Governor Donaghey, State Treasurer Yates and members of the State Board of Charities went to Fort Smith on November 19 to inspect the site offered for a branch of the State Hospital for Nervous Diseases.

Russellville, Nov. 18.—In their report to Circuit Judge J. H. Basham, the recent grand jury of this term of the Pope County Circuit Court, among other things, stated that "there are a great many doctors practicing medicine in our county who are not registered as the law directs." The statement caused considerable surprise among the citizens of Pope County, and Judge Basham expressed his opinion to the effect that he would order the grand jury that is to serve the next term of court to investigate the matter fully and return indictments accordingly.—Gazette.

The American Journal of Surgery will produce in December a Philadelphia issue of their journal, the subject-matter of which will be composed entirely of contributions from among the leading men of that city. Among the subjects to appear and their contributors are the following:

"A Consideration of the Diagnosis and Treatment of Retro-Displacement of the Uterus," by E. E. Montgomery, M. D., Professor of Gynecology, Jefferson Medical College; "Polypoid Growth of the Rectum and Report of a Recent Case," by Lewis Adler, Jr., M. D., Professor of Diseases of the Rectum, Philadelphia Polyclinic; "Tumors of the Urethra in Women," by Barton Cooke Hirst, M. D., Professor of Obstetrics, University of Pennsylvania; "The Control of Hemorrhage During Pregnancy," by Edward P. Davis, M. D., Professor of Obstetrics, Jefferson Medical College; "Cyclodialysis," by Walter L. Pyle, A. M., M. D., Ophthalmologist to the Mount Sinai Hospital, Assistant Surgeon of Willis Eye Hospital, etc.; "Roentgen Treatment of Malignant Diseases," by Charles Lester Leonard, A. M., M. D., ex-president of the American Roentgen Ray Society; "The Conservation of the Middle Turbinate Body," by William A. Hitschler, M. D.; "The Diagnosis and Treatment of Ectopic Pregnancy," by F. Brooke Bland, M. D.

The following well-known surgeons will also contribute, and their titles will be announced at a later date:

Ernest La Place, A. B., A. M., M. D., Pro-

fessor of Surgery, Medical Chirurgical College; Prof. William Campbell Posey, Professor of Ophthalmology, Philadelphia Polyclinic; John G. Clark, M. D., Professor of Gynecology, University of Pennsylvania; H. M. Christian, M. D., Clinical Professor of Genito-urinary Diseases, Medical Chirurgical College; John A. McGlinn, A. M., M. D., and others.

A commission to devote its time to the study of pellagra and uncinariosis has been appointed by Governor Donaghey, composed of the following well-known physicians of the state: Morgan Smith, Little Rock; O. Howton, Osceola; H. H. Rightor, Helena; Robert L. Smith, Russellville; S. T. Tapscott, Searcy; Albert McGill, Chidester; W. M. Crutcher, Pine Bluff; Adam Guthrie, Prescott; E. H. Martin, Hot Springs; M. S. Dibrell, Van Buren. The board will hold a meeting at an early date for the purpose of organizing and to outline plans for a comprehensive study of these diseases in this state.

Personals.

Dr. W. J. J. Paris, of Cave-in Rock, Ill., has recently located at Blytheville.

Dr. R. C. Prewitt, of Osceola, who has been very ill for several weeks, is now improving.

Dr. P. E. Johnson, of Blissville, spent two days in the city during the latter part of October.

Dr. John L. Jones, of Searcy, was elected vice president for this state at the recent meeting of the Tri-State Medical Society, held at Memphis.

Drs. Morgan Smith and C. P. Meriwether attended the banquet at Lonoke November 10, given by the Third District Medical Society at their annual meeting.

Dr. Abraham Flexner, of New York, who is visiting the medical schools of the United States in the interest of the Carnegie Fund, spent November 15 in this city looking over our schools.

Drs. N. J. Lattimer, of Corning, Leonidas Kirby, of Harrison, and J. R. Crigler, of Walnut Ridge, were in attendance at the recent meeting of the Grand Lodge, F. & A. M., held in this city.

Dr. A. H. McKenzie, of Dardanelle, secretary of the Yell County Medical Society, made us a visit while on his way home from Hot Springs, where he had attended the annual meeting of the I. O. O. F.

Dr. Leonard R. Ellis, of Hot Springs, major surgeon of the Arkansas State Militia, has

been appointed by Governor Donaghey a delegate to the American Medical Congress, which meets in Chicago, February, 1910.

Drs. James H. Lenow, dean of the Medical Department of the U. of A., and J. P. Runyan, dean of the P. & S. Medical College, attended the meeting of the Association of Southern Medical Colleges, held at New Orleans November 19, and both were honored by the association, Dr. Runyan being elected vice president and Dr. Lenow being made chairman of the Executive Committee.

Dr. W. A. Brown, of Monticello, while in this city for the Confederate veterans' reunion during the month of October, gave us a list of some old books he has in his library, which we are sure will be of interest to our readers. The list is as follows: "A Treatise on the Diseases of Children," by John Eberle, M. D., published in 1837; "Elements of the Theory and Practice of Physics," by George Gregory, M. D., published in 1831; "The First Lines of the Practice of Surgery: An Elementary Work for Students and a Concise Work for Practitioners," by Samuel Cooper, M. D., published in 1808; "A Treatise on Febrile Diseases, Including the Various Species of Fever and All Diseases Attended With Fever," by A. P. Wilson Philips, M. D., F. R. S. (England), with notes and additions by Nathan Smith, M. D., published in 1816; "The Western Journal of Medicine and Surgery," edited by Daniel Drake, M. D., and Lunsford P. Yandell, M. D., published in Louisville, Ky. He has the bound volumes for the years 1841, 1842, 1843, 1844, 1845 and 1846.

District and County Societies.

The Third District Medical Society closed one of its most successful two days' meetings Thursday afternoon, November 11, at Lonoke, after electing the following officers for the ensuing year: President, Dr. H. H. Rightor, Helena; secretary, Dr. T. J. Stout, Brinkley; treasurer, Dr. E. A. Callahan, Carlisle. There were present during the two days' session some fifty physicians from different sections of the district. The first afternoon was devoted to addresses by Mayor J. M. Gates, Drs. Cuning, president of the Lonoke County Medical Society, Hornor, of Helena, and the annual address of Dr. S. A. Southall, president of the district society. Wednesday evening the visiting physicians were tendered a banquet by the local fraternity and the busi-

ness men of the town. Dr. S. A. Southall acted as toastmaster, and a number of responses were made. On Thursday the following program was carried out: "An Epidemic of Acute Lympho-adenitis, Non-tubercular," Henry Thibault, Scott; "Fibroids," C. R. Shinault, Little Rock; "Toxemia of Pregnancy," P. E. Thomas, Clarendon; "The Doctor in Politics," J. O. Rush, Forrest City; "Examinations and Their Significance in Pelvic Work," R. L. Saxton, Little Rock; "A Case in Practice," A. B. Ferrell, Widener; "Water," W. S. Bradford, Haynes; "Conservative Treatment of Compound Fractures," G. G. Altman, Helena; "Report of Three Cases of Pellagra," James Parker, DeVall's Bluff; "Pellagra, with Report of Six Cases," H. H. Rightor, Helena; "Referendum," T. B. Bradford, Cotton Plant; "Report of Some Cases," C. C. Abbott, Pettus; "La Grippe Among Children," E. A. Callahan, Carlisle.

Election of officers in the afternoon, as noted above, and the selection of Stuttgart as the place for the next annual meeting, in November, 1910. The visiting medicos were loud in their praise of the hospitality and royal treatment accorded them by the people of Lonoke.

POPE COUNTY.—The Pope County Medical Society met in Russellville Thursday, November 4, 1909. The meeting was called to order by Dr. R. M. Drummond, the president, an unusual number of physicians and visitors being present. Rev. Milligan opened the society with prayer. Drs. Drummond and Smith followed with short talks for the betterment of the medical profession. Dr. Linzy, president of the Yell County Medical Society, made an address on the coöperation of physicians in organizing medical societies. Dr. Hays spoke along the same line. Rev. Milligan made a talk on the duties of the physician. Dr. Howell, of Oklahoma, made a talk on the method of conducting medical societies. The society then adjourned for dinner, all marching in a body to the dining hall, where the Russellville physicians had arranged a banquet for the society and visitors. After an elaborate dinner had been served the members and visitors again repaired to the hall, where the society was again called to order by President Drummond at 1:00 o'clock. First on the program was the address of welcome by Hon. A. S. Hays, then the response by Dr. H. F. Spillers. Dr. Berryman followed with a paper on diph-

theria, which was discussed by Drs. Smith and Meriwether. Dr. Meriwether, our district counselor, made an address and told of the great improvement in medical organization, giving the society much advice on methods of organization. He denounced the jealousy and rivalry existing in the profession, and gave the county society as a remedy. Hon. J. T. Bullock next addressed the society. He advocated a sanitarium in Pope County and showed many advantages it would be to the people. Dr. Smith read a paper on "Umbilical Hernia," and reported a case of strangulated hernia, which was discussed by Dr. Meriwether. Dr. Rye asked the society's advice in a case of varicose veins. Drs. Teeter, Linzy and Meriwether spoke on the subject. Dr. Spillers spoke on fees and fee cutting as practiced by most country doctors, especially, and asked a remedy for this evil. Dr. Meriwether, in reply, said the remedy was in organizing doctors so strongly as to overcome this. He favored the admission of the licensed physician as a member of the county society, and hoped the Pope County society would send their delegate to the next state meeting instructed to vote for the amendment allowing undergraduates membership. He appealed to all doctors present who were not members to become members of their county society. He also made an impressive talk, showing the importance of a state board of health. Dr. Linzy reported a case of gunshot wound in which the bullet was found to have passed through the left lung, lodging in the spinal column, causing paralysis and death on the twelfth day. Dr. Hays related a case of injury to the spinal column resulting in paralysis and death on the seventh day. Dr. Stanford also reported a case of injury to the spinal column resulting in paralysis and death. He thought the paralysis due to a blood clot on the spinal cord. Dr. Drummond then invited candidates for membership to the society, and the following were enrolled as new members: Drs. A. W. Rye, London; J. M. Stanford, Hector; W. A. Montgomery, Atkins; C. R. Teeter, Pottsville; Chester Russell, Russellville; J. F. Hays, Scottsville; W. J. Brown, Dover; J. B. Britt, Gumlog; L. D. Berryman, Russellville. Dr. R. L. Smith, of Russellville, was enrolled as an honorary member. The proposition of erecting a sanitarium was brought up. The society decided to form a stock company and sell shares at \$25.00 each. A committee composed of Drs. Smith, Berryman and Teeter was appointed to so-

licit subscriptions and make a report at the next meeting. A motion was then made and carried to adjourn until the next meeting, to be held Thursday, December 2, 1909.

R. W. DARR, *Secretary*.

LAWRENCE COUNTY.—The Lawrence County Medical Society met in regular session in the office of Dr. G. Max Watkins, of Walnut Ridge, October 6, 1909. Dr. J. W. Elders, of Alicia, made application for membership and was unanimously elected. This makes twenty-six members in our county society, and to my knowledge there is not a graduate in our county who does not belong to the society. Dr. J. C. Land presented a clinic with a local paralysis affecting the motor nerves of the right arm, which has caused some difference of opinion. The boy had received a blow on the back of the head a month previously, and in the meantime had suffered from an attack of remittent fever of a week's duration. The father said the boy was improving. The following members were present: J. R. Crigler, J. W. Elders, J. C. Land, H. R. McCarroll, J. W. Morris, E. T. Ponder, G. A. Warren and G. Max Watkins.

H. R. McCARROLL, *Secretary*.

GREENE COUNTY.—The Greene County Medical Society met in regular session, October 6. Dr. Paul Dickson read a paper on ulcerative endocarditis, and Dr. Henry Dickson one on functional heart lesions. At the close of the meeting the doctors' wives came in, bringing ice cream and cake, and a most delightful half-hour was spent in social chat. The ladies who were so thoughtful of the doctors' social side of life were: Mrs. F. M. Scott, Mrs. W. R. Owens, Mrs. J. R. Haley, Mrs. J. W. Johnson, Mrs. James McKenzie, Mrs. G. T. Hopkins and Mrs. Herbert Scott. Dr. Dillon and Miss Christine McFarland were visitors. The November meeting was held in the office of the secretary, November 3. Present: Drs. R. E. Bradsher, Thad Cothren, J. R. Haley, R. A. Markham, Paul Dickson, Henry Dickson, Jones Lamb, Olive Wilson.

OLIVE WILSON, *Secretary*.

JEFFERSON COUNTY.—The Jefferson County Medical Society met at the office of Drs. Scales & Duckworth, with the following members present: Drs. Stewart, Luck, John, Clark, Hankinson, Duckworth, Scales, Rowell, Caruthers, Smith, Jordan, Troupe, Breathwitt and Lowe. The minutes of the last meeting

were read and approved. Dr. O. G. Blackwell made application for reinstatement to the society, and his application was unanimously accepted. It was moved and carried that a committee be appointed to devise a fee bill and report same for the action of the society at the next regular meeting. Drs. Scales, Luck and Jordan were appointed on this committee. It was decided that social functions and meetings were of great benefit to our society, and a committee composed of Drs. Clark, Hankinson and Lowe were appointed to arrange for a banquet for the physicians of Jefferson County and their wives and the sweethearts of any physicians who might be so unfortunate as not to have wives. This committee was instructed to report at the next meeting. Dr. Cantrel, of Greenville, Texas, visited our society on the 18th of last month, at which time Drs. Runyan, Smith, Lenow, Dunaway and Meriwether, of Little Rock, were invited down. Drs. Runyan, Lenow and Dunaway came down, and all were heard at this meeting. The society spent a very pleasant and profitable evening, and every member thoroughly enjoyed the remarks of each distinguished visitor. W. T. LOWE, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society met in Osceola on the 9th inst., with the following physicians present: Drs. R. P. Nall, Armorer; J. F. Sanders, Blytheville; S. A. Lowry, T. F. Hudson and J. S. McCreight, Luxora; T. G. Brewer, H. C. Dunavant and O. Howton, Osceola. The paper on "The Dentist and Physician," by Dr. W. E. Taylor, of Blytheville, was ably written, well presented, and very interesting. That case of pellagra failed to "show up," and as a result several of the physicians who had never seen a case of the disease were disappointed. The subject was discussed, however, and at the next meeting a case of true pellagra will be reported by Dr. E. E. Craig, of Pecan Point. Considerable time was taken up in discussing the feasibility of organizing a physicians' protective association for Mississippi County, whereby parties who are bad pay can be came to "come across." We understand that this plan is working like a charm in Lauderdale County, Tennessee, and in other parts of the country. At the December meeting the committee will submit plans, etc., of getting this organization on foot. At the next meeting unfinished papers will be read and discussed, also a "Symposium on Tuberculosis" by several of the members. Mississippi County is in the

First Councilor District, and we cordially invite our councilor to be with us at Blytheville, December 14, 1909. O. HOWTON, *Secretary*.

Book Reviews.

A Treatise on the Principles and Practice of Medicine.—By Arthur R. Edwards, M. D., Professor of the Principles and Practice of Medicine and Clinical Medicine in the Northwestern University Medical School, Chicago. New (second) edition, thoroughly revised. Octavo, 1246 pages, with 100 engravings and 21 full-page plates in colors and monochrome. Cloth, \$5.50, net; leather, \$6.50, net. Lea & Febiger, Philadelphia and New York, 1909.

This volume presents, in a compact form, the most recent ideas on the subject of which it treats ("Principles and Practice of Medicine"). The author has certainly done himself credit in his revision of this work, in that it has enhanced its value to the general practitioner. It is condensed, and yet accurate in every particular on treatment, and gives all that is known of the diseases from a modern and scientific standpoint. It is especially valuable because of its common sense and practical dealings with each individual case upon its merits. The sections on scientific infections and diseases of circulation and their treatment are rich in recent views advanced in this line. The subjects presented are admirably classified. Considerable attention and detail are directed to the pathological and diagnostic points. His selection of therapeutic remedies is in accord with recent views. The author teaches a very valuable lesson in the fact that every phase of treatment, prophylactic, dietetic and therapeutic, has a clear and common sense application to the individual case, which demonstrates the accurate observation and skill of the author, and we bespeak for this volume a place of great usefulness in the library of the general practitioner. —D. R. H.

A Practical Treatise on Diseases of the Skin—For the Use of Students and Practitioners. By J. Nevins Hyde, A. M., M. D., Professor of Dermatology and Venereal Diseases in the University of Chicago, Medical Department (Rush Medical College). New (8th) edition, thoroughly revised and much enlarged. In one very handsome octavo volume of about 1137 pages, with 223 engravings and 58 full-page plates, in colors and monochrome. Cloth, \$5.00, net; leather, \$6.00, net. Lea & Febiger, Philadelphia and New York, 1909.

This is the eighth edition, and describes many new and rare affections. While the author's name is sufficient guarantee that the subject-matter has been selected with great care, I wish particularly to commend his presentation of eczema, psoriasis and epithelioma. The book contains many good illustrations, and the treatments are full and explicit, which makes the work of practical value for the student and general practitioner. W. R. B.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. L. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS.

1909-1910.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarrroll	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunnning	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Osceola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Quachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marvell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
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Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Summers	Elm Springs	Nina V. Hardin	Fayetteville
White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

APPENDICOSTOMY IN THE TREATMENT OF EPILEPSY.*

J. P. Runyan, M. D., Little Rock.

Epilepsy has been defined as a chronic disorder of the cerebral cortex, usually functional, sometimes organic, characterized by periodical attacks of loss of consciousness with or without convulsions, and accompanied occasionally by mental excitement. The epileptic attack is said to be a katabolic discharge of the nerve centers.

There ought to be no question at the present day that all cases of traumatic epilepsy in which there is any demonstrable localized lesion of the brain or skull, should be operated as soon as possible. It is also admitted that the sooner that this is done and the fewer seizures the patient has had, the better are the chances for a cure.

Operation, however, in the so-called idiopathic or hereditary cases, and in all cases where the habit has become well established, is generally regarded as useless. Cases in which the epilepsy was attributed to tumors involving the cortical areas, depressed fractures, wounds, circumscribed syphilitic pachymeningitis, localized tubercular meningitis, old atrophies, scleroses, cysts, all the conditions acting as direct irritants have been operated on and the various operators have reported different results.

There is, however, a large number of cases in which the most careful examination of the brain has failed to show any pathologic changes to account for the epilepsy.

It is to these latter cases that I direct your

attention today and am anxious to stimulate a discussion as to their etiology, pathology and symptomatology and treatment. The profession must be aroused from the lethargy into which it has fallen concerning these unfortunates. The old heresy that these cases are incurable, that no benefit can come to them from any treatment must be dissipated.

Confronted by the undeniable fact that one person in every five hundred suffers from epilepsy, that the majority of them sooner or later become dependents, is it right to deprive them of hope and consign them to their doom without an attempt at least to benefit them? And besides the humanitarian we must consider also the social aspect. A cure for this class of cases would revolutionize the social economics of the country.

Since in these cases there is no lesion in the cerebral cortex to account for the symptoms, the most plausible explanation and the most generally accepted theory is that we have to deal with an autotoxemia. That there is periodically, some place in the system, most likely the alimentary tract, produced, a toxic substance, which becomes absorbed and acts as an irritant to the predisposed cortical centers and thus provokes the convulsion. And I am firmly convinced that even in these idiopathic cases, in which there is a cortical irritation, there must be present an autotoxemia to produce the convulsion. If the lesion were sufficient to produce it the patient would be in the status epilepticus all the time.

Clinical study of all these idiopathic cases show two conditions constantly present, one constipation, favoring stagnation of intestinal contents and hence putrefaction and production of toxins. Second, overeating or glutony. We have here two conditions which invariably favor the production of toxins in the intestinal tract and the absorbed toxins irritate, by producing vasomotor spasms, the cer-

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

ebal cortical areas and lead therefore to the katabolic discharges of the nerve centers.

Pheripheral irritation, due to the presence of accumulations of hard fecal matter in the intestines, is also another factor in the reflex production of convulsions. Too many cures have been reported as the result of removal of pheripheral irritation, such as operation for phimosi, tracheotomy, etc., to be explained as mere coincidences. The convulsions in children, due to intestinal irritations, due to worms, due to the lodgment of fish bone in tonsils, etc., or the swallowing of foreign bodies, give us an abundance of analogous examples. To the question, "Since this is a condition of overeating and constipation, why not limit the patient's diet and administer purgatives and cure the case?" I would answer: "Why is it that amebic dysentery is so much more amenable to treatment since Weir's fertile brain suggested appendicostomy as a means through which the bowel could be effectually irrigated?" Irrigation of all kinds, high and low rectal enemata, had been tried in vain, all kinds of remedial agents, per orem, had likewise failed to cure these cases and appendicostomy with subsequent colonic irrigations is now regarded as a specific. May we not reasonably expect a correspondingly good result in the treatment of epilepsy? There are at least four factors to be considered: First, the removing of conditions which favor putrefaction, hence the toxemia; second, the removal of the pheripheral irritant, the hardened fecal material; third, the powerful suggestion of an operation and that something will be done; fourth, the shock of illness following operation, which almost invariably arrests the habit for a time, just as an attack of typhoid fever does. So, for these reasons, I believe the operation is entitled to a fair trial. We should also bear in mind that there is a large number of other factors that enter into the production of the epileptic symptom complex, such as transmitted hereditary neurosis, etc., and consequently our operative treatment should be supplemented by the employment of such remedial agents as will meet the circumstances of the case.

I am convinced that appendicostomy in well selected cases, followed by thorough irrigation of the intestines, and the irrigation continued for a sufficient length of time, one or two years in average cases, will be the means of curing quite a large number of cases

and of improving the condition and diminishing the frequency of seizures in those not entirely relieved.

Why do we administer bromides? Certainly never with the idea of curing the case, but simply to diminish the frequency and lessen the severity of the attacks. And at what a frightful sacrifice do we attain this result! The patient's mentality. Then shall we condemn appendicostomy as a means of treatment because not every case so treated is cured?

Bromides continued for a long time obtund the intellect of the patient more than the disease itself, whereas the operative method produces no such result. The patient's diet should be provided with a generous amount of fruit. Unless there is severe emaciation the nitrogenous diet should be reduced to the lowest caloric requirements. Meat and salt should be curtailed as much as possible. Saline cathartics should be administered per orem in addition to the daily colonic irrigations consisting of a tablespoonful of Epsom salts to a quart of warm water. This irrigation should be continued daily for one year or more, and thereafter, depending on the circumstances of the case, every day, or every other day, for a period varying from one year to the remainder of the patient's life.

DISCUSSION.

Dr. Meek—I would like to ask Dr. Runyan a question. Do I understand that you irrigate the appendix—irrigate from that point downward?

Dr. Runyan—Yes, sir.

Dr. Meek—How long are you supposed to keep that open?

Dr. Runyan—Until the patient is well.

Dr. Meek—Have you ever had any practical experience along that line?

Dr. Runyan—I will answer that in closing the discussion.

Dr. Meek—That is all I want to say. I think the idea is a good one. I consider whatever Dr. Runyan has to say is worthy of acceptance.

Dr. Snodgrass—In regard to this operation and keeping the fistula open: I have had some experience in these cases. One case I followed closely for perhaps eighteen months. There is no trouble at all in keeping the fistula open. If you introduce a catheter and teach the patient to introduce it, he can flush out his own colon without any trouble. It will

cause a great deal of relief immediately. In this case I refer to a young man, nineteen years old. Before operation the patient had a decided tendency to fight, and his family were afraid to leave him at home. He improved a great deal in the first three months. After that they neglected the flushing, and allowed him to eat heartily. He was an excessive user of tobacco, and on account of his excesses in overeating and too much tobacco, he began to grow morose, and the attacks came on with more severity than before. By persuading him for some time he consented to resume irrigation. After opening the fistula, which had closed, and flushing out again, he improved. I think it is well to keep that fistula open. It does not cause any inconvenience for a man to have this kind of fistula. There is scarcely any leakage from it. The contents of the intestines will not escape; there may be a little gas pass. An abdominal binder will catch all the waste from this fistula, and it causes very little inconvenience to the patient.

Dr. Walt—I think we should recognize the fact that these cases are chronic, and that chronicity means abnormality and abnormal cell formation, and abnormal cell formation necessarily means it will require time to correct it. We should recognize that it will be necessary to continue drainage for a long period to accomplish it. We cannot expect that an abnormal cell, a cell that is made of abnormal product, with constituent elements being out of relative proportion, to produce normal conditions and to perform normal functions. Consequently, we can very readily see that it is going to take a long time to cure these patients; but if we nevertheless continue our treatment long enough we may reasonably expect to reap good results if we make the right effort to do so. I see no good reason why we should not get absolute results if we persevere.

Dr. Bledsoe—I would like to call attention to just one point in the paper, the fallacy of supersaturating the epileptic patient with bromide. The most important thing in the treatment of epilepsy is not medicine; but it is diet and elimination, plenty of fresh air and work. It has been proven, of course, by the recent palliative treatment that this seems to be the simplest way to solve this enormous economic problem. I see a good many cases.

When they come to me they are practically demented from the effects of bromide and chloral. I would just like to emphasize the point that Dr. Runyan brought out.

Dr. Runyan—In answering Dr. Meek's question as to whether I had had any practical experience along this line, I will say that last June I operated upon a young man who had had epileptic seizures for about ten years, every month having all the way from two to ten attacks. Since that time we have kept up irrigation; every day for two or three months, then every other day for three months more. At the end of that time he was feeling so well, and having been free of any attacks during that time, he thought that irrigation was not entirely necessary to his comfort. He had also been instructed along the line of his diet, and he conceived the idea that he could overstep the bounds, as all of these cases will. I want to call special attention to that again. They all have bulimia, every one of them. He went out and ate a great big meal, went to his work and had another very hard attack. He came to me next day with his face all scarred up from the fall during this attack. I again impressed him with the importance of keeping up irrigation and he started in religiously again, and up to about six weeks ago, when he left for Panama, he had not had another seizure. This case, I think, is conclusive proof that some benefit can be gained from this treatment, even though you might not call it a cure. If I could have a medicine that would keep me from having an attack for six months and at the same time do me no harm physically, I would consider that that medicine had done me some good and worth while keeping up.

In well selected cases, I want again to emphasize appendicostomy as a means of irrigation of the colon, and as a very valuable adjunct in the treatment of epilepsy.

Dr. Meek—I did not intend to reflect upon you. It is a perfectly new thing to me, and I was asking for information. What do you irrigate for?

Dr. Runyan—The main thing is to irrigate—to clean out. I have as a routine measure used a tablespoonful of Epsom salts. That facilitates the movement of the bowels; probably has the same effect on the toxin; washes it out, possibly.

A CASE OF NEUROPARALYTIC, OR TROPHIC ULCER, TREATED SURGICALLY.*

R. C. Dorr, M. D., Batesville.

My report in this case will consist principally of a letter written by Dr. J. E. Felts, the father of the young man injured, as follows:

"Melbourne, Ark., March 31, 1909.

"Dr. R. C. Dorr, Batesville:

"Dear Doctor—Robert is doing fine; sore completely healed; have not let him sit up yet, as the place is very tender, and we do not want to take any risks of bruising it. However, he can sit up soon.

"On August 15, 1905, Robert S. Felts fell from a building a distance of 38 feet, sustaining numerous and serious injuries; three ribs broken; left shoulder crushed very badly; left clavicle broken in three places; three flesh wounds on back, one to three inches in length, cut completely to the bone. The spinous process of the twelfth dorsal vertebra broken off, turned half around and moved one-half inch downward from position. First lumbar vertebra turned (rotated) one-half around, and is now exactly in that position (there is compression of the cord).

"The second lumbar vertebra is fractured horizontally through the center of the body. Radiographs show fracture to be complete through and through. From the fall, complete paralysis of the lower extremities was present. For ten hours after the fall he appeared almost as a corpse and, of course, no hope was entertained for his recovery; but after this, reaction came about so gradually that for several days he was almost lifeless and was so badly swollen it was impossible to move him, or do anything for him except keep him under opiates, that his suffering could be made bearable. Day after day we dressed his wounds, and used such treatment as seemed best, and after the lapse of three or four months, he had improved so that he could be propped up in bed and sit up. In December, same year, an ulcer formed at the lower point of the oecyx. This gave us trouble for three or four months, but healed. In June, 1906, another ulcer formed in the gluteal region. This one was larger and in deeper tissue. It suppurated internally and deep-

ened rapidly. Caries set up at the point near the tuberosity of the left ischium. From this absorption of poison was so rapid that the young man was near unto his death. The ulcer and conditions from the formation defied all treatment. I 'phoned Drs. Kennerly and Dorr, and on November 26, 1906, Dr. J. H. Kennerly operated and removed quite a lot of dead bone. Unexpectedly to us all, he so far recovered that by the following summer he could be removed, and on August 1, 1907, I took him to Batesville, and placed him in the hands of yourselves, with the hope that you might so treat him, and especially the ulcer, that it would heal. He stayed with you one hundred days. While there his general health seemed improved, but the ulcer did not improve, and it was your opinion it never would heal. I took him back home on November 11, 1907, crushed in heart, but with undaunted courage and the fidelity of a father's love. I took him in my own charge again. Under this treatment he remained about the same for about four months. Not satisfied, I set about to find another place to take him for treatment. With the assistance of some good doctor friends, we decided on the Missouri Baptist Sanitarium, at St. Louis. So on March 8, 1908, I took him to that place. After taking up two weeks in making radiographs by Dr. Carmen (an expert) and otherwise making every kind of an examination so that a satisfactory diagnosis might be reached; diagnosis made, treatment outlined, and all hands set about to do their best to cure the patient. I came home; days passed; no better; weeks passed; no better; months passed, no better. On August 2, 1908, I brought him back home. On examination I found him in a great deal worse condition than when he went there. I again took him in hand, and worked faithfully, but to no avail. In January, 1909, the young man grew worse. It was evident other bone was involved, as absorption of poison was rapid, and the case appeared to be approaching the end. Dr. R. C. Dorr was summoned, and on January 27, 1909, operated; removing a large amount of dead tissue and a small lot of bone; operation done without either internal or local anesthetic; not without pain, but the unequalled nerve that has underlain this life and borne it to a safe issue.

"This is the 21st day of March, 1909. Less than two months since the operation. This great wound is completely healed. The young

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

man is in fine health, getting fleshy, is bright and jolly, with a good appetite, sleeps well as a child, and has a disposition as cheerful as the birds that sit in the sunshine and sing their beautiful melodies. We are thankful, and cannot express our gratitude for his recovery, and are now ready to heartily concur in the old adage, that 'where there is a will (and plenty of nerve) there is a way.'

"With high personal regards, I am,

"Fraternally your friend,

(Signed)

"J. E. FELTS."

"Robert was seventeen years old when hurt."

In addition to what the doctor states, I would add that any pressure on his toes would produce ulcers. While in our care we carried out the treatment laid down by the leading authorities at our command; also, we freshened the edges of the skin and the muscles, and brought them together with stitches, but without any result. What I did when I operated on him in January, after explaining to his father there was no authority so far as I knew for what I was going to do, but, with his consent, as every other thing had been tried, I would remove all muscle tissue clear to the bone, moving all skin except enough to cover the ulcer, which I did for a radius of over six inches, stitching it together and bringing the skin right down to the bone, establishing gauze drainage at all dead spaces. My reason for doing this was, first, to get rid of all dead space; second, to get rid of all sepsis, as near as possible; third, by removing these muscles and skin, I reasoned we would get more nerve energy to the remaining skin. Whether this reasoning is correct or not would take more than one case to prove. Let that be as it may, the result obtained justifies the operation, in my opinion.

DISCUSSION.

Dr. Bledsoe—I was very much interested in the paper. It is a very remarkable case and exceedingly satisfactory outcome. I wish he had gone into it a little more definitely and described the specific changes in the reflexes, etc.

Dr. Dorr—He was paralyzed and is still paralyzed.

Dr. Bledsoe—It is probable that the condition was due to hematomyata, which had softened the spinal column and destroyed the integrity of the affected areas of the cord.

These acute bedsores very frequently appear after a long and very aggravated caudal condition and sloughing will follow. They come on very rapidly in some conditions, and often in a day or two after an injury a whole spinal segment will slough off. In some cerebral injuries you will see this sloughing of the abdomen wall. One of our noted Chicago neurologists says that these conditions are primarily due to trophic trauma. Of course, that is the primary cause of it. The secondary infection is just a matter of time. These ulcers get terribly infected. In view of the excellent result I do not want to criticize Dr. Dorr's procedure, but I hardly think that he would advocate surgical treatment for trophic ulcers themselves. I am inclined to think the excellent result was due to the fact that regeneration had set in in the sensory tract of the cord, and the cleaning out the dead tissue and the bone certainly aided in the healing process.

Dr. Dorr—I have not much to add. I called this neuroparalytic ulcer in this report. As I understand it, every authority that I have read holds out this theory. It means that there is a lack of proper nerve supply to that part. That is the predisposing cause, and that is the reason it goes under that name. Any pressure or infection of any kind brings about his ulcer, and that is the exciting cause. Take the eye: Paralysis of the fifth nerve, you have neuropathic keratitis. If you don't take that eye out or do not keep it clean it will become infected and an ulcer will form and the sight in that eye will be lost. In regard to our patient, he was under the care of different neurologists, some of the very best in St. Louis. They had him there four or five months, but they did not cure him. We had him one hundred days and didn't cure him. We tried everything without success until we tried this. We did this and the ulcer healed. He is not well of his paralysis. The ulcer was in the gluteal region. We did this because we had a similar one on the sacrum that healed by local treatment. You can take that boy and let him wear shoes three days and he will have ulcers on the toes. I am sure these were not bedsores.

Dr. Bledsoe—I would call that an acute bed sore. As I understand it, it is gangrene resulting from the cutting off of circulation. If you will look up your text-books in reference to this you will find the same thing you

are talking about. They call it acute bedsores.

Dr. Dorr—A bedsore is a result of a low condition of the system and brought about by pressure that produces gangrene in the part. Therefore, I could not classify it under the head of bedsore. The paralysis is brought about by lack of nerve supply. I am sure those toes did not get any pressure sufficient to produce a bedsore before putting on the shoes. In this case, there was no gangrene at any time. Besides, all ulcers formed below line of compression of cord and none above.

PNEUMOCOCCUS ENDOCARDITIS.*

C. H. Hoffman, M. D., Ph. D.

Herrschl¹, in antebacteriologic days, noticed the simultaneous occurrence of pneumonia and endocarditis and he inclined to the belief that the pneumonia and the valvular affection were caused by the same agent. When later on the excrescences of endocarditis were examined by bacteriologic methods for the etiologic agent, different bacteria were found in that endocarditis which occurs with pneumonia or is consecutive to it. At times the same coccus which is present in about 7 per cent of all cases of croupous pneumonia the diplococcus of Fraenkel and Weichselbaum were found; at other times the pyogenic staphylococci and streptococci. In other cases all these varieties were demonstrated together.² We have therefore cases in which we have to deal with the localization of the causative agent of pneumonia on the valves of the heart; in other cases we have to deal with a mixed infection.

Weichselbaum, Roemheld and other demonstrated pneumococci in the endocardial vegetations in the absence of a past or present pneumonia. Netter⁴ and Weichselbaum⁵, equipped with all the modern bacteriologic aides, studied this question and both arrived at the same conclusion, namely, that we have an endocarditis during or after pneumonia, which is caused by a localization of the diplococcus of Fraenkel and Weichselbaum on the valves of the heart. They also stated that

this complication is rare. Liebermeister⁶ mentions that among 254 cases observed at the Tubingen clinic there was but one case of endocarditis. Weichselbaum states that among 33 cases of endocarditis which he examined bacteriologically he found the pneumococcus seven times; that is, in about one out of every five cases. Osler⁷ claims that 25 per cent of all malignant endocarditises are due to the pneumococcus. Harbitz⁸ claims that in forty-three cases of infectious endocarditis he found the pneumococcus five times.

The interesting question to the pathologist is whether the endocarditis produced by the pneumococcus has a specific pathologic anatomic form, or if it presents the same pathologic picture as do the endocarditis produced by other pyogenic bacteria? Netter and Weichselbaum investigated this problem. They were not able to establish a clear anatomic differentiation from other forms. Netter held that the globulous constitution of the efflorescences was characteristic. He described them as having a rounded contour, a peculiar greenish-yellow color and a striking laminated structure, which conservation in alcohol rendered more apparent. He claimed that the right half of the heart is more frequently involved and also that the aortic valves are more frequently affected than the mitral, all of which is the reverse of the usual forms of endocarditis. He says that embolism and infarction are rare, a point to which we will revert later. Most all observers agree that a purulent meningitis is frequently present, and that the meningeal exudate contains only pneumococci. Netter concludes by stating that all transitions from simple verrucose deposits to extensive ulcerations can be found. Weichselbaum affirms that pneumococcus endocarditis can exist in the verrucose form although the ulcerative variety is the more frequent. He mentions peculiarly large polypus excrescences.

Kerschensteiner⁹ recently, as the study of 11 cases, claims that the pneumococcus endocarditis presents a specific pathologic anatomic picture by which it can be differentiated from other forms of endocarditis. He claims the following characteristics, that is characteristics if they are present all together: First, an intermediary form between the ulcerative and verrucose variety, the endocarditis polyposa of Ziegler; second, large vegetations with a broad base; third, a smooth

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

and discolored surface; fourth, a tendency toward softening.

Before entering upon the discussion whether we are justified in establishing a specific anatomic form of pneumococcus endocarditis I desire to sketch briefly three cases that have come under my observation. For the presentation of the history of one of the cases, I am indebted to Dr. J. P. Sheppard, of the Pulaski County Hospital.

Case No. 1. Clinical data from service of Dr. J. T. Priestly, Mercy Hospital, Des Moines, Iowa: Male; age 34; admitted June 24, 1906, with pleuritic pains. Patient was well nourished and when first seen no pulmonary involvement could be determined. The heart sounds were clear; later there was compact dullness in right upper lobe, attended with delirium. Patient had been a hard drinker. Was transferred for a few days to the mental ward. On his return to the medical ward on the 7th of July the dullness of the upper right lobe was more extensive and a systolic murmur was audible at the region of the apex, the second pulmonic sound was considerably accentuated. The patient became comatose on the following day, the cervical muscles became rigid, there was present choked disk, the urine showed the presence of albumen and casts and two days prior to his death hematuria. Patient died on the 11th day of July. Postmortem findings of interest for our present purpose were: Heart relaxed, right ventricle dilated, in the right auricle loose masses of fibrin, the pulmonary semilunar valves were competent and free from deposits. At the surface of contact of the mitral valve were two small reddish bean-sized deposits which were moderately adherent. Both upper lobes of the lungs were airless and hepatized, the right in the stage of gray, the left in the stage of red hepatization. There were some subpleural ecchymoses, such as we are used to find in infectious processes. The spleen presented the picture of an infectious tumor and in its substances were a few small anemic infarcts with hemorrhagic borders. The kidneys were besides parenchymatous degeneration, the seat of infarcts; in the right a hemorrhagic one and in the left an anemic one. There was an extensive purulent meningeal exudate at the base of the brain. With the material from the excrescences on the mitral valve, two white mice were inoculated. Both mice succumbed to a typical pneumococcus septicemia within

forty-eight hours. Smears made from blood of the heart and spleen of the mice showed numerous encapsulated diplococci. In sections of the excrescences a few isolated diplococci could be demonstrated; no other bacteria. The pus from the meningeal exudate contained characteristic pneumococci.

The second case occurred at the Pulaski County Hospital at Little Rock, Arkansas, and was under observation but a brief period of time. Male; age 56. No clinical data available. Autopsy August 14, 1907. Complete gray hepatization of the right upper and middle lobes. From the cut surface a cloudy, emulsive pus-like fluid can be scraped, so that we conclude that the process in the right lobe was approaching resolution. In the left lower lobe beginning circumscribed red hepatization. In the heart the process is localized on the mitral valve, where on the free valvular margin two pea-sized, gray-reddish verrucose deposits were found. The other valves showed no changes, the endocardium being clear and smooth. There were some fine old fibrous adhesions between the layers of the pericardium. Convexity of the brain shows an incipient meningitis. Smears from the pial exudate show numerous encapsulated diplococci. Sections of the excrescences showed the diplococci in large numbers.

Third Case. This case occurred in the service of Dr. S. P. Vaughter and was very interesting in that the patient had had pneumonia six weeks before. Male; had pneumonia six weeks prior, which confined him to his bed for fourteen days. Patient was about one day and the following day had a severe rigor, after which he was confined in his home to bed with a continuous fever. I made the following observations two days before his death: Marked dyspnoea and cyanosis, temperature 104, severe headache and rigidity of the cervical muscles. Dullness on percussion over right lobes of lung. Pulse 162, the action of the heart was rapid and the heart sounds were more or less indistinct. Autopsy January 8, 1909: Body well nourished and very muscular. Right side postpneumonic empyema, amounting to two liters, which had produced considerable compression of the right lung. Left lung edematous; no other changes. The aortic valves were markedly altered. The anterior surfaces of both valves show at the free margin large yellowish-gray soft-feeling excrescences of the size of a bean. They are situated on the ulcerated surfaces

of the valves and project into the lumen of the aorta. At the right anterior aortic valve, which appears strongly excavated, is a pea-sized perforation, around which are grouped endocardial excrescences of the same composition. The other valves and the pericardium were normal. Spleen was enlarged, softened and of almost fluid consistency and showed three infarcts penetrating from the surface into its substance. The corresponding thrombi were found in the branches of the artery linealis. Permission to inspect the brain and meninges was not granted. Headache, rigidity of the cervical muscles, and the mental symptoms all confirm the meningeal involvement in this case. An immediate inoculation of mice was impossible and the animals inoculated 48 hours later remained well. It is a well known fact that pneumococci lose their virulence quickly. Numerous encapsulated diplococci were found on smears made of the valvular vegetations. The empyemic pus also contained pneumococci.

These pathologic findings of the cases of pneumococcus endocarditis prove that we can not accept Kerschensteiner's dictum as to a separate anatomic form. Two of the cases presented the picture of a verrucose endocarditis, the last of an ulcerative or malignant one. From the standpoint of pathologic anatomy we cannot therefore recognize a distinct variety. The duration of a pneumococcus endocarditis is brief and the diagnosis is rarely made clinically because the coexisting sepsis masks the cardiac symptoms. Bacteriologically the pneumococcus can be isolated from the blood. There is nothing in the symptomatology to differentiate this affection from any other form of malignant endocarditis; we have chills, high and irregular fever, followed by sweats at times very profuse, with delirium and progressive weakness and emaciation. The fever is not invariably irregular and remittent, but may be as in the third case, of the continued type. Delirium may be followed by stupor and coma. Certain symptoms of great diagnostic value are the lodgment of septic particles or vegetations, detached from the swollen endocardium and swept to various parts or organs of the body. Thus there may be as in Case 3 embolism of the spleen, with localized peritonitis, and also pain and enlargement of that organ, or as in Case 1, embolism of the kidney, with pain and hematuria; or, if in the liver, pain and perihepatitis of the cerebrum

with hemiplegia, of the retina with dimness of vision, of the stomach and intestines, of vomiting and diarrhea (not necessarily of embolic origin), of the skin and subcutaneous tissues with ecchymoses or petechial spots. Acute suppurative meningitis is frequent, being present in all three cases.

We conclude therefore that the pneumococci are not to be regarded solely as the magnets of typical inflammation in the lungs but also as typical pus and septicemia producers and that "we have a pneumococcus septicemia due to the pneumococcus solely." Biologically and botanically, they are closely related to the principal pus producers, the streptococci.

¹ Hersch (1862), *Berichte der Medicinischen Section der Schlesischen Gesellschaft in Breslau*.

² Weischelbaum, *Wiener Medicinische Wochenschrift*, 1888, Nos. 35 and 36.

³ Ziegler, *General Pathology*, page 575.

⁴ Netter, *Archives de Physiologie*, 1906, page 106.

⁵ Weischelbaum, *Zieglers Beitrage*, Band 4, and *Wiener Medicinische Wochenschrift*, 1906.

⁶ Liebermeister, *Ebstein Schwalbe*, Band 1, page 284.

⁷ Osler, Vol. 3, *Infectious Diseases*.

⁸ Harbitz, *Deutsche Medicinische Wochenschrift*, 1907, No. 8.

⁹ Kerschensteiner *Munchener Medicinische Wochenschrift*, 1905, Nos. 29, 30, 31.

DISCUSSION.

Dr. Martin—I was asked by the secretary a few minutes before leaving to open this discussion. I told him it was an entirely new subject to me, but he left orders that I open it anyhow. I am glad that he did, because it gives me a chance to say that I must have overlooked several cases of endocarditis in my treatment of pneumonia when I was in general practice, and in active work in the country, where I saw from ten to twenty-five cases of acute pneumonia every year, and some of them would certainly take a malignant form and die. I think that a great many of these cases, especially as I know some of them had meningitis, must have died of endocarditis. Probably we don't recognize the complication when it arises, because it nearly always arises in the face of a severe attack of pneumonia and the usual septic symptoms, and very often with the patient so sick that you say he had double pneumonia and died. I also think that there must be some mild form of endocarditis other than those that the doctor reports, due to the pneumococcus. I remember one case which came to mind while he was reading his paper, of a man who had had a very mild case of pneu-

monia, a man who had been in perfect health about fifty years of age, who made a slow recovery. About three weeks after he was discharged, he made a trip—he was a traveling man—and came in a month later and said that he didn't get strong, and that he got out of breath frequently. Of course, when he said "out of breath," I examined his heart, and found that he had a very slight mitral regurgitation, which he had not had before, because I had examined him for life insurance. I treated him for this ailment, besides pneumonia. That man lived for three years afterwards, and finally died with the usual pericardiac complications. I have no doubt that we have a great many cases of endocarditis which are unrecognized and prove fatal, and that we also have some milder cases which go on and finally are recognized as heart disease later on.

Dr. Bledsoe—Regarding Dr. Hoffman's statement that the pneumococcus is responsible for a great many septic conditions besides of the lungs, I remember one case of a young negro girl, a case of pneumonia, and apparently getting along well. She was as yellow as a pumpkin, and jaundiced even in her fingers and nails. Her temperature went up like a flash. She promptly died. I had an opportunity to do an autopsy upon her. I found a very interesting condition. She had endocarditis, which was due, now I know, to the pneumococcus. She also had empyema of the gall bladder. I was so much impressed with the condition of her gall bladder that my attention was directed most largely to that. I injected the gall duct with the pus and made a typical pneumococcus specimen, and I also isolated a pure culture of pneumococci in the gall bladder. That case, which was recalled to me by the doctor's paper, merely serves to illustrate the fact that there are a good many infections sometimes that are due to the pneumococcus.

Dr. Hoffman—I only want to state one point against the idea that the endocarditis which is produced by the pneumococcus has any specific pathological anatomical picture as Kester would have it. I agree with Dr. Martin that we have all variations, all kinds of endocarditis; we have variations from the benign over into the malignant forms. We have all different degrees, depending upon the malignancy. So do we have it in the case of the pneumococcus. In the diagnosis of the severe forms of pneumococcus endocarditis,

it is complicated in most cases by sepsis, and I think the most important diagnostic points are probably to be derived from the organisms that we get. We have a case of pneumonia, that has undergone resolution, and afterwards thrombosis and embolism of the kidneys, hematuria with constant pain about the bladder; that should make us suspicious that pneumonia had been left behind; or some on the valve of the heart which can become detached, and could have become detached, and disseminated by the blood stream, producing those very septic symptoms.

TOO MUCH OPERATIVE GYNECOLOGY.*

J. W. Meek, M. D., Camden.

The development and growth of operative gynecology has revolutionized surgery and, like all other revolutions, has gone to an extreme not contemplated by its originators. The religious reformation that established Protestantism halted not until the fires of persecution had been lighted by both Holy Church and reformer; and, also, the French Revolution, begun in the sacred cause of liberty to the masses, ceased not until the soil of France was wet with the blood of both royalty and canaille.

So this surgical revolution, all honor to many of its almost miraculous victories, called not a halt until the army of laparotomists waved their crimson scalpels, stained with the blood of *all* classes, over many needless fields of operation.

Less than half a century ago the abdominal cavity was considered forbidden ground, and a wound of the peritoneum was equivalent to a death certificate. Now modern asepsis and antisepsis, thanks to the advances of science, have almost converted this once sacred region into a tournament field for the newly fledged surgeons to pull off their sprinting matches or other exploitations. All honor to the *real* abdominal surgeon! His works and his skill are entitled to all praise, but there are things in medicine worthy of our most serious study, that some abdominal surgeons never "dream of in their philosophies." There is a fascinating glitter and

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

attraction about surgery that lures many an ambitious young medical man from the quiet paths of conservative therapeutics and ends only in a carnival of needless bloodshed. A few years ago, oophorectomy had become so common and apparently so void of danger, that I remarked to a surgical friend that I fully believed that the time was near when many of our rich society ladies would have their ovaries removed before entering into the sacred bonds of wedlock. I am glad to say that the pendulum is now swinging the other way. The young woman without ovaries, it has been found, soon loses some of the natural graces and attractions that God gave her. She sometimes shows a disposition to grow a mustach. She becomes obese, and, as Gross once said, "If married, she may be a man's mistress but never a wife."

A writer has said that "sanitariums" have become hotels in which those may remain until nature has cured them of the surgeon's mutilations, and when the wayfarer once has paid his board bill he may journey on to restored health, or more probably the grave, without the care or concern of those who have "bled" him. This criticism is unjust, taken as a whole, but when the wound has healed and the patient is on his legs, the surgeon too often forgets to follow up his history and learn if his malady be relieved. The wound is healed, so the unfortunate *must* be well.

Too many laparotomists find it easier to diagnose abdominal disorders, probably functional in character, by an incision into that once sacred recess, than to carefully gather all the symptoms together and by a strict and orderly arrangement of the same deduce a rational conclusion, safer to the patient, and fully as satisfactory in treatment.

It would be a much easier task for the surgeon to amputate a crushed and shattered limb than to cleanse and readjust the broken but vital fragments, and by careful attention nurse them back to health, but the sufferer would much prefer to limp through life with a disabled but useful member than to leave a portion of his anatomy prematurely in mother earth.

It is in no spirit of hostility that these few lines are written, but merely as a warning from an "old foggy" that the procession had best halt occasionally and see where it is.

In conclusion, I will say, "All honor to the gynecologist and laparotomist!" He has res-

cued thousands from untimely graves, and eternity alone can reveal the results of his glorious work, but conservation should be his watchword and let him not measure his greatness by the hecatomb of ovaries and vermiform appendices that are stored away in the back room of his office.

The sun of the great Napoleon would not have gone down at noontide had his vaulting ambition not planned the campaign to Moscow. So the gynecologist and the laparotomist would better consider well every case before depriving a human being, the noblest of God's work, of the organs Nature gave to her.

DISCUSSION.

Dr. Snodgrass—I want to thank Dr. Meek for his excellent, straightforward essay. I believe that a paper of this kind should have an inhibitory influence over some of us here, especially when the subject is handled by a man of Dr. Meek's mature age and large experience. These opinions come from looking at the other side of the question. I have none other than favorable comment to make upon this paper. I have enjoyed it very much.

Dr. Meek—I thank you, gentlemen, very much for your kind and considerate attention and for the applause showing your appreciation, and I am deeply grateful to Dr. Snodgrass for his friendly comment.

THE THERAPEUTIC VALUE OF SOME OF THE ELECTRIC MODALITIES.*

W. T. Lowe, M. D., Pine Bluff.

My object in choosing this subject is to try to stimulate some of our brother practitioners to investigate this valuable therapeutic agent. I think its field is rather limited, yet in some conditions as a therapeutic agent it is invaluable.

No doubt there is not a subject in medical literature against which there is so much prejudice as against electrotherapeutics. This is readily understood when we take into consideration the small amount of time given to its study by the profession. Another reason for this is the fact that when electricity was first introduced as a therapeutic agent fakirs took it up and went over the country

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claiming to cure everything with it, regardless of cause or severity of trouble. Some good men who were overenthusiastic on the subject made claims for it that today we know are untrue. And so it is those who confine themselves strictly to the use of electrotherapy, or any other method, are certain to neglect to a degree the means of meeting effectively all of the indications as present in most cases. The call is for a broad-gauge, honest investigating spirit, with a willingness to accept all that is good, and a determination to weed out the spurious and dangerous in therapeutics.

The time has come and the rights of humanity demand at the hands of the great profession to whose care their lives are trusted to put forth their best endeavors and adopt only the best measures, eliminating useless remedies, for the relief of suffering and disease. Not only the physical measures, but all therapeutical and surgical procedures should be judiciously investigated, and professional bias and personal motives and interests be forever removed from consideration by our great profession and the results of investigation be given wide publicity.

What is electricity? Just what it is we do not know. It must be some form of indulatory vibration, and vibration originates all force—heat, light, motion, chemical action and electric currents. We should remember that living means nutrition, nutrition means chemical action, chemical action means electric currents, and electric currents mean vibration. If we should arrest all vibration of the universe for a fraction of a second, silence, death and destruction would be the result.

The therapeutic value of electricity will depend on the proper selection of patient and proper application of the particular electric modality indicated. From a therapeutic standpoint, electricity appears in over twenty different modalities, each having a specific action and indication. To discuss all of them here would be impossible, so I shall confine my remarks to the galvanic, faradic, sinusoidal, static and X-ray. Since the direct, or galvanic, current is the source of all currents, we shall consider it first.

When the positive pole of a direct current is placed over a painful nerve, as in a supra-orbital neuralgia, we at once cause a change to take place in the nerve structure in the painful area. The nerve, if not brought back to a natural state, is at least incapable of

conducting for the time being painful sensations. The negative electrode in these cases should be so placed as to cause the current to travel the entire length of the nerve tract, if possible. This treatment is especially applicable in such conditions as lumbago. If we apply this current with a strength of ten to twenty-five milliamperes with one large electrode covering the lumbar region, with the feet resting in a normal saline solution connected with the negative pole, we lose the distinctly polar effect and substitute the interpolar, which again causes a decomposition and recomposition of all intervening molecules. Such an application is indicated when we want a decided tissue change to take place, especially in neurasthenia and epilepsy. Facial paralysis, painful muscles and joints, sciatica, chronic rheumatism, nervous headaches and neurasthenics are sometimes greatly benefited by this mode of treatment.

The faradic current is one of the most useful modes of applying electricity, but, unfortunately, it has been neglected to a great extent. For medical purposes the effects of this current depend on the rate of vibrations. Low interruptions have a stimulating effect, while high interruptions have an inhibitory effect upon tissue. This current, when strongly interrupted, becomes a powerful agent for causing muscular attractions in all voluntary muscles. At the same time the high pitched high tension current forms a multiple ribbon vibrator, caused by its tetanic effect, a relaxing and soothing condition of all muscles in a state of reflex spasm. This current is also used to a good advantage in combination with the galvanic current, especially with patients who are very sensitive to the action of electricity, and in doing pelvic work.

Next comes the sinusoidal current. This current has no equal in its power to contract nonstriated muscle fiber. It is therefore without a rival in the treatment of atonic conditions of involuntary muscles, as atonic dyspepsia, atonic intestinal indigestion, and in atonic condition of the bladder and rectum.

The next is the static wave current. This has a decided mechanical effect on the tissues, and in relieving pain due to pressure, as in stasis, its effect is sometimes wonderful. The vibratory effect of the current on the metabolism of tissue cell is to stimulate all to activity, stimulate secretion and excretion and tissue-building to a marked degree. Locally, conditions of stasis and stagnation are over-

come, and a local tonic condition of the arterioles is induced. This current will penetrate any cell in any part of the body, and as proof of its action in stimulating cell activity we have only to examine the urine of patients before and after taking these treatments. The indications for the use of static electricity might be divided as follows:

1. To relieve local congestion and hyperemia.
2. To relieve pain due to pressure of retained material that should be eliminated.
3. To lessen nervous irritability.
4. To correct errors in metabolism.
5. It gives fine X-ray for treatment and diagnosis.

First, to relieve local congestion. Under this class of cases might be mentioned such conditions as chronic rheumatism, lumbago, neuralgia, and cases where the tissues have been bruised and we have a local stasis with the accumulation of inflammatory products with impaired function.

In cases where there is pain and impaired nerve action, due to faulty elimination from bowels, and we have what is called rheumatism. After the bowels and kidneys have been made to act freely and properly, the patient should be put on an insulated platform and connected with one side of static machine. The other side of machine should be grounded by connecting with water or gas pipe, then with a suitable ball electrode, which is also connected with the ground, the patient should be sparked over seat of inflammation and tenderness until he feels relieved. Some patients can stand more and stronger sparks than others. The strength and power of penetration of spark will depend on length of spark gap. These treatments should be given every day until patient is relieved.

The next form of electricity is that mysterious agent known as X-ray. Just what it is we do not know, hence its name. It is the most wonderful, and in the hands of the inexperienced operator the most dangerous, of all therapeutic agents. Yet, like all other poisons known to therapeutics, if properly used and controlled it becomes one of the most useful agents known to modern science. When I say properly used I mean cautiously caused, for the dose of it is not known, and it will always be impossible to know it, since everyone is susceptible to a different degree to its effect. We can measure the amount of X-ray used, but since there are so many

idiosyncrasies to its effect, the proper dose can never be determined. The X-ray is not an agent that destroys tissue by any chemical action, as is believed by many, but it is simply an ether vibration, as shown by Roentgen and others, differing from the solar light waves only in length and frequency.

The therapeutic value of the X-ray will depend upon the relative resistance of the normal and adventitious tissue in the individual being treated. That the Roentgen ray has a peculiar inhibitory effect on tissue is proven by the fact that if eggs of any kind are repeatedly exposed to strong X-ray for a period of thirty minutes, then put in incubator or under hen, without exposing them to radiant light, they will not hatch. If corn, oats, wheat or seed of any kind be repeatedly subjected to the Roentgen rays for a period of thirty minutes, then planted at once, they will not come up. Yet if we take grain after exposing to X-ray and subject it to light for a while, its germinating function will be restored.

In the light of these facts, why can't an antiseptic or antigermicidal effect be claimed for the X-ray? Why should it not be a good therapeutic agent in treating infected diseases? If it has (and I think it has) a germicidal effect, why should it not be a good agent in treating, for instance, tuberculosis by destroying some of the germs in the tissues and leaving them there to bring about by means of their tuberculin or antitoxin effect a natural immunity. This seems to me to be in keeping with the theory of producing immunity by the injection of antitoxin from the culture of the dead bacillus of tuberculosis, or the injection of the dead tubercle bacilli themselves. It has been proven that the normal tissue elements in most cases outlive or resist to a greater degree exposures to the X-ray than the forms of life or lowly vitalized tissue present in it.

It is also known that if not carried too far the tissue regains perfectly its normal tone and vitality after exposures have been discontinued. Some conditions that usually suggest the use of the Roentgen ray are:

1. Treatment of acne, lupus erythematosus, lupus vulgaris, chronic eczema and psoriasis.
2. To destroy tissue the vitality of which is lower than the normal tissue, as in carcinoma, epithelioma, tuberculosis, and sarcoma.
3. As anodyne in painful and inoperable malignant conditions, where no hope for cure

is maintained, but life prolonged and made more comfortable.

4. As means of diagnosis.

The great trouble with using the Roentgen ray has been the fear of producing the so-called X-ray burn. This misfortune happens sometimes to the best operators, the reason for which I have previously explained, but I have never seen an X-ray burn happen where the cornell tube was used. I have seen this tube employed over a thousand times, and have yet the first dermatitis to see. I have applied it to epitheliomas in direct contact with the skin for thirty minutes each time, three times a week for three months, and never saw the slightest dermatitis. In my opinion, in the treatment of lupus, chronic eczema, epithelioma, and nonsurgical cases of tuberculous glands, the X-ray should be the method of choice.

In treating epitheliomas where much tissue is involved, care should be taken not to continue treatment too long at each treatment, since the rays break down too much tissue and cause rheumatic pains throughout the body, as this effete material is being eliminated. In the treatment of eczema, where a large area is involved, I would expose the affected area to a soft tube with weak light twice a week till slight dermatitis was produced, then withhold the treatment till this dermatitis has disappeared, then resume in the former way. The next day after each treatment I would expose the part to the blue light for ten minutes each time to produce a physiological hyperemia. In this way we get the benefit of Biers' method of treatment, which I think is a good one.

In treating tuberculous glands, the diseased gland should be placed in contact with cornell tube for fifteen minutes every other day till some reduction is noticed in size of gland, then twice a week is sufficient. Epitheliomas should be treated every other or every third day with cornell tube in direct contact with lesion for fifteen to twenty minutes each time.

In tuberculosis of bone, osteosarcoma and deep-seated neuralgia, the pain is oftentimes greatly benefited by the application of a strong Roentgen ray, the disease arrested, and sometimes greatly benefited.

Another valuable use of X-ray is in conditions of malignant growths, where surgeons hesitate to remove them lest they recur again. If these cases are subjected to X-ray eight or ten times before, and every week

for two months after operation the likelihood of it recurring is not nearly so great.

Now, in conclusion, I wish to say again that my object in choosing and writing on this subject is to try to induce some of us to put more time to the study of this sometimes very valuable therapeutic agent, and spend less time in condemning it. In carefully selected cases it is a very valuable therapeutic agent. It is not to be used in every case that we have at all. An attempt to use it in the treatment of all conditions and a lack of knowledge of its effect have been very instrumental in causing the present prejudice against its use. But with the proper knowledge of its effect I think electricity has found its proper place in medicine.

RESPONSE TO WELCOME ADDRESS
TO POPE COUNTY MEDICAL SOCIETY BY HON. H. F. SPILLERS.

Mr. Chairman and Brethren:

I must first acknowledge my profound appreciation for being permitted to respond to the welcome address in behalf of the city. I deem it a great honor, and I beg to assure you that it goes not without appreciation. You may know that I am highly elated because you have been broad-gauged enough to ignore the well defined line of demarcation which separates the graduate from the undergraduate, and since in your generous liberality you have condescended to allow an embryo of the fraternity to give expression here, I assure you I shall be brief in my remarks.

Brother Hays, one of Arkansas' most distinguished lawyers and statesmen, has paid a beautiful and fitting tribute not only to the city and county at large, but to the medical profession as well. Since listening attentively to his glowing words of tribute in our behalf, I feel that while it may be possible that my bridle is not hitched to a star, the fraternity at large is on a much higher plane than it was a generation ago. I want to thank the honorable gentleman for his many expressions of kindness and regard for the doctors of this county, and wish to assure him that the thought is a reciprocal one, and we return our regard to the town.

I am very desirous of seeing our profession get closer together. The old adage that each tub should stand on its own bottom is becoming more foggy and fallacious every day; and

especially is this so with the medical profession. We cannot afford to spend our precious moments fighting each other when we have so many destructive and ravenous diseases to fight. If all the time we waste in lambasting and backbiting a fellow of the fraternity were spent in studying our *materia medica* and surgery, we might save a greater per cent of our patients and alleviate a great deal more suffering.

I may never go very high in the profession; indeed, it's probable I won't, but, thank God, I have a high ideal for a model physician. I am frank to admit that in my mind we have but few such today. Had we a number of ideal physicians in our county now the organization which is now but staggering for existence would long since have been perfected and we would today be on a higher plane of medical thought. There is to a greater or less degree inherent in most of us a desire to stay in the old rut, to tread the well-beaten paths of our predecessors. In other words, it is easy to go in the line of least resistance. We should remember that gravitation itself will let an object fall, but that it requires energy to raise one. Dead fish of a stream all float down—only live ones swim. Are we drifting? Are we gravitating?

The old plan of treating a patient after the style of an old brother whom I once had the displeasure to meet will not suffice for a death certificate today. This gentleman said:

"I purges 'em and bleeds 'em
And then I sweats 'em,
And then if they wants to die
I lets 'em."

The left eye of a tree frog caught on the north side of a birch tree at 9 o'clock on a cloudy morning does not yield the results in treating diseases now that it did in former years, and the decoction of boiled hogs' hoofs hardly ever comes in contact with us while we are using anti-phlogistics and bleeding our pneumonia patients into their own vessels. Formerly congestion covered a multitude of diseases and a vast amount of ignorance. I suspect many a poor victim has died from intersusception or a twisted gut whom the old family doctor (the best and safest one on earth) said "It is a hopeless case. It is congestion of the stomach and bowels." "There are more strange things on earth, Horatio, than we ever dreamed of in heaven."

At the present time and with the modern

mode of treating appendicitis, a very small per cent succumb, where formerly, no doubt, many a person fell victim to that disease and was buried with a sloughed appendix, when a very small amount of cutting would have saved the patient.

Do such conditions obtain today, anywhere? I opine they do. Of course, there are none such in our county. Most all such fall under the category of congestion of the liver or stomach, or what not. Oh, how many crimes are committed in thy name, Congestion! What a wonderful aid you are in diagnosis.

Examples galore might be cited, but these are sufficient. "But," says one, "what has this to do with our society?"

Just this: When you come down to our meetings and get up to tell us that you have a patient who has chronic malarial poisoning and dropsy, or a sequel, someone may ask you to study a little closer and see if you haven't a genuine case of Bright's disease, or more specifically speaking, intestinal nephritis. Examine the urine closely and see if you don't find albumen.

I want to say to you that when a man avoids these meetings, I doubt very seriously if he is qualified to make a urinalysis.

I was roasted very severely by a doctor since I came back from the legislature for lending my support and influence to the Turner bill. He said he was a graduate O. K. (God spare the mark), but that he thought that inasmuch as he was permitted to work his way through school by practicing between terms, boys of the present day should be permitted to do the same thing. In other words, we should continue piling humanity on the altar of sacrifice in order to do for the so-called doctor what his school did not do—or perhaps more correctly, was unable to do. A man who will object today to a higher standard of education has an axe to grind, and usually a very dull one at that. The doctor who will kick on such an act as the Turner bill, when 90 per cent of the students favor it, fears that we might by a technicality override the *ex post facto* and again draw them over the coals of a rigid examination.

Another thought along the same line might not be much amiss just here and now. The profession loves and honors an ethical man, a man who is willing to sacrifice everything for a principle and who places the regard for his fellow practitioner above the dollar. No

sharp lines may be drawn to go by, and no firm or fixed set of rules may be taken to encompass our conduct. It may be said, however, that he is indeed an unprofessional fellow who will greet you on the street with a smile and then cut prices in order to get your patients so he may throw out your medicine when called in.

He who will advertise a cure for incurable diseases is not only exceeding the speed limit in advertising, but, in my opinion, is jeopardizing his license under our late statute, the Turner bill; and if any crime outside of criminal abortion should revoke a man's certificate, it is certainly that of professing something which you are not and palming off on an ignorant and long-suffering public inert drugs for incurable diseases and enriching themselves without giving value received. And the victims are generally the most innocent and indigent.

In conclusion, permit me to say that I am indeed in sympathy with any move which will tend to lessen the suffering of the pangs of disease. He who contributes his little mite or efforts toward the alleviation of pain and misery undoubtedly has a reward laid up for

him in heaven. I know the doctor is sometimes constrained to think, and oftentimes is thoroughly convinced, that he many times gives his service when it is apparently unappreciated or even scoffed at, and with the poet is made to believe that,

"God and the doctor
We alike adore—
Just on the brink of danger;
Not before."

The danger passed, both alike are requited; God is forgot, and the doctor slighted. But in spite of all doubts and fears, worry and tears, in the final ending your welcome plaudit shall be, "Inasmuch as you did it unto the least of one of these, you did it unto Me." And if there is anything in my life which I have done that I absolutely count on softening my death couch, it will be the thoughts of cooling the parched tongue of a passing friend or the brightening the intellect of a human being so that he may say goodbye to loved ones as he enters and "passes through the valley of the shadow of death."

I bid you Godspeed in your every endeavor.

THE JOURNAL

OF THE

Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council monthly.

Edited by

C. P. MERIWETHER, M. D.
Councilor Eighth District

307-8 Southern Trust Building, Little Rock, Ark., to whom all communications should be addressed.

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ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust Building.

Editorials.

THE PHARMACOPEIA, ITS HISTORY AND ITS IMPORTANCE TO THE MEDICAL PROFESSION.

The importance of the next Pharmacopoeial Convention should be thoroughly understood by all medical societies and physicians. These conventions, as well as the national Pharmacopoeia, originated in a proposition submitted to the Medical Society of the county of New York by Dr. Lyman Spalding in 1817. Dr. Spalding proposed that the United States be divided into four districts—northern, middle, southern and western—and that each district should hold a convention of delegates from the medical societies and schools situated within it, to formulate a pharmacopoeia. The four district pharmacopoeias were to be taken to a general conven-

tion to be held at Washington, composed of delegates from the four districts. From the district pharmacopoeias the delegates were to compile a national pharmacopoeia. This plan was adopted, the district convention for New England being held in Boston and the convention for the middle states in Philadelphia, June 1, 1819. No conventions were held in the southern and western districts, but delegates to the national convention were appointed. The first general convention for the formulation of a national pharmacopoeia met at Washington, January 1, 1820. The two pharmacopoeias prepared in the northern and middle districts were consolidated into one work, which was published in Boston, December, 1820, in both Latin and English. A second edition appeared in 1828.

The convention of 1820 provided for its own perpetuation and for future revisions, by instructing its president to issue notices in 1828 to all incorporated state medical societies and incorporated medical colleges and schools, asking each to vote for three delegates to represent the district at the general convention to be held at Washington in January, 1830, the convention to consist of twelve delegates. The second convention was held at Washington on January 4, 1830, thirteen delegates being present. It provided for its perpetuation by instructing its president to issue a notice to incorporated state medical societies, incorporated medical colleges and incorporated colleges of physicians and surgeons, asking each to elect three delegates to attend a general convention to be held at Washington in January, 1840. The district plan of representation was given up and has never been resumed.

At the third convention, held in 1840, twenty delegates were present. A committee on revision and publication was appointed which published the second revision of the Pharmacopoeia in 1842. This committee was instructed to ask the coöperation of schools of pharmacy in its work.

In the call for the fourth convention of 1850, incorporated colleges of pharmacy were included and were allowed to send three delegates, the same as medical colleges. This convention, which met at Washington in May, 1850, was composed of thirty delegates. Only two pharmaceutical schools were represented, all of the other delegates being from medical colleges and societies.

In 1860 the fifth convention was held,

thirty delegates being present, four colleges of pharmacy being represented.

The sixth convention was held May 4, 1870, sixty delegates being present, seven pharmaceutical schools being represented. The fifth revision was published in 1873.

The seventh convention met May 5, 1880. One hundred and nine delegates were elected to represent ten medical societies, twenty-three medical colleges, eleven pharmaceutical colleges and the medical departments of the Army, the Navy and the Marine Hospital service. Seventy-five delegates were present.

The eighth convention was held on May 7, 1890, 175 delegates being present, representing fifteen medical societies, twenty-three medical colleges, twenty-five pharmaceutical associations, twenty-three colleges of pharmacy and the medical departments of the three government services. The provisions made for representation in 1900 were the same as those for 1890.

The ninth decennial convention was held at Washington May 2, 1900. Forty-one delegates were present representing twenty-six medical societies, forty-four delegates from thirty medical colleges, fifty-three delegates from twenty-seven pharmaceutical colleges and fifty-seven delegates from twenty-eight pharmaceutical societies, the American Medical Association, the American Pharmaceutical Association and the three government services being represented by twelve members. The total attendance, as shown by the official report, was 207, of which 114 were pharmacists and 93 were physicians.

The point to be emphasized in the above historical summary is that the convention was originally inaugurated and for many years carried on solely by the medical profession, and that it was not until 1850 that other than medical societies and medical colleges were authorized to send representatives. In that year, pharmaceutical colleges were for the first time given representation. Not until 1890 were pharmaceutical societies added to the list of accredited bodies.

The medical profession during the past thirty years has not given to the revision of the Pharmacopeia the attention which its importance deserves. In spite of the fact that this book originated with the medical profession and was compiled and published primarily for its use, it has come to be regarded too much by physicians as a book which is of interest and value mainly, if not solely, to the

pharmacist and in which the physician is not especially concerned. The attitude of the physician toward the Pharmacopeia as well as the lack of knowledge on this subject has been frequently commented on in *THE JOURNAL*. It is now time that specific and lasting reforms were effected. Two definite steps should be taken before the meeting of the next convention in Washington: (1) All incorporated state medical associations and medical colleges entitled to representation should select the three best representatives possible and should see to it that they attend and take part. (2) Each county society should devote at least one meeting during the winter to a discussion of the present Pharmacopeia and the formulation of suggestions as to its improvement.

There is, indeed, grave danger lest this work, which was primarily a reflection of the needs of the medical practitioner, should become a purely pharmaceutical rather than a medical compilation. There is also danger of its being controlled by commercial interests. Such a result will be due solely to lack of interest and activity on the part of the medical profession. Active interest in this matter should be aroused and medical societies should see to it that they are properly and effectively represented in the coming convention, and that their delegates are instructed regarding the desires and opinions of those they represent. If every county society will devote one evening to the discussion of this question and will send its recommendations to Dr. Reid Hunt, chairman of the Committee of the American Medical Association on the Pharmacopeia or to the Council on Pharmacy and Chemistry of the American Medical Association, their recommendations will be transmitted to the convention and will receive consideration.—*The Journal of the American Medical Association*, December 4, 1909, Vol. LIII, pp. 1918 and 1919.

RESOLUTIONS REGARDING PELLAGRA

The Third District Medical Society, which met November 11 in Lonoke, adopted the following resolution regarding the prevention of pellagra in Arkansas:

Resolved, That this society recognizes the widespread existence of pellagra in the United States and urges upon the State and county governments the necessity of bringing their

powerful resources to bear upon the vital question of its cause, prevention and control.

Resolved, That while sound corn is in no way connected with pellagra, evidence of the relations between the use of spoiled corn and the prevalence of pellagra seems so apparent that we advise continued and systematic study of the subject, and, in the meantime we commend to corn growers the great importance of fully maturing corn upon the stalk before cutting and gathering same.

Resolved, That the work of their society be brought to the attention of the various county boards of health and they severally be urged to specially investigate the disease, particularly as regards its prevalence and that they see that the proper inspection of the corn products in the various counties be had.

Be it further resolved, That the secretary be instructed to forward a copy of these resolutions to the various county medical societies of the district; also to the boards of health asking their co-operation and request that these resolutions be published in the various county papers.

(Signed)

F. A. COHN.
A. A. HORNOR.
H. H. RIGHTOR.

PELLAGRA—SHORT REPORT OF THREE CASES.

G. E. Cannon, Rochelle, La.

This disease is a peculiar condition affecting mostly the nervous system, skin and alimentary tract. We believe the nervous system is the part affected, and the skin lesions, raw and burning surfaces of the whole alimentary tract are caused by the diseased nervous system.

As the etiology is yet a disputed question, we shall not mention it further than to say these cases had all been excessive corn bread eaters. No doubt there are many cases all over the country in their first stage that are being diagnosed as hysteria. Hysteria is not half so common a disease as you would think. How many cases are diagnosed hysteria simply because the physician cannot locate a cause for the complaint? This is too often the case. These very cases, after being watched for two or three years, will often show a case of some graver trouble. Let us not cover our ignorance by diagnosing hysteria when we know not what else to call it. There is often a cause

for any complaining, no matter in what line of business. Let us be more reserved and study our cases closer.

Pellagra no doubt often begins some months or even years before any external sign is visible. When you see a patient complaining of indigestion, burning in the stomach, with slow speech and an inactive mind, with lack of proper nutrition of the whole system, you may suspect pellagra. Watch it for months and you may see a scaly or rough condition of skin on hands and feet, especially if the patient goes barefooted; and the tongue may be sore, with a black, scaly skin around mouth.

The three cases reported have been treated by us. Another case of a young man who had been under treatment for two years, and for the past few months under our treatment, was a suspected case, but no lesions other than those of the nervous system were prominent when last seen, so a positive diagnosis could not be made.

Case No. 1.—This was a white man, about forty years old, treated in Louisiana about five years ago. He was a very poor man. He lived about eight months under our treatment, but gave a history of having the same condition for about eighteen or twenty months in all. His hands, wrists and feet were continually blistering and peeling off. The mucous membranes of mouth and tongue were perfectly raw, and his rectum was the same way part of the time. Diarrhea was constant, and he was almost crazy all the time. The last few days of his life he was in delirium most of the time. His was a horrible picture, and if you see a case like it once you will not soon forget it. Several physicians saw this case, but no diagnosis was made. At that time we thought no pellagra existed in this country, but more recently have been able to diagnose the case.

Case No. 2.—A negro woman, forty-two years old. When this patient was first seen, in 1907, nothing except a fibroid tumor of the uterus could be found that might produce the symptoms complained of by her. In the summer of 1908 the patient appeared again with the peculiar nervous symptoms and burning in stomach exaggerated. This time both hands and forearms were covered with a blistered, sore appearance. Tonics, X-ray treatment and applications of a carbolyzed ichthyol and zinc oxide ointment seemed to remove it. The case was seen again in the early summer of 1909, with the same condition of hands and feet. At this time a diagnosis was made. The

same treatment was given and the skin lesions were removed, and as the woman was well cared for and remained indoors, her improvement continued.

Case No. 3.—This is a negro woman, thirty-five years old. When first seen, her mouth and tongue were in bad condition, and the lesions could be seen plainly around mouth. She was poor and worked hard in the field. She said she delighted in eating cornbread, and would often eat a large piece between meals. At first her mind was very inactive, and she would talk and cry about her condition. Most of these cases seem to have forebodings of some awful thing coming upon them. This case improved some under tonics, arsenic and eating wheat bread, but when last seen the prognosis looked gloomy. Both these last cases were constipated.

If poor cornbread is the cause of this, it is because we are too careless. The North eats practically no cornbread, but raises nearly all the meal that we use. We are careful about our horse feed, but buy meal for our own use without knowing anything about how it is made or handled. To prevent this, let us raise and make our own meal by selecting the very best corn for meal. Then grind it at home mills. This was done twenty years ago, and no doubt if it was done today our Southland would be free from this dread disease. Be careful of your meal.

STANDARD SET BY BOARD.

The qualifications of a college recognized as "reputable" by the State Medical Board of the Arkansas Medical Society in accordance with the recent act of the legislature, effective August 6 last, were made public at the close of an adjourned session of the board. The standard set by the board is as high as that demanded by any state and is such that reciprocal agreements have been entered into with eight state medical examiners and licensing boards up to the present.

In the future the board will recognize as "reputable" no college which has received a grading of less than 50 per cent by the Council on Medical Education of the American Medical Association.

The first inspection of the council will apply to all cases where diplomas were granted prior to August 6, 1909. The second inspection will apply in all cases where diplomas were granted subsequent to that date.

All applicants for examination by the board as candidates for licenses to practice medicine in Arkansas must have diplomas from "reputable" medical colleges, to comply with the present law, the announcement of the qualifications to be set by the Medical Examining and Licensing Board for a reputable college has been awaited with interest by all practitioners of medicine in this and neighboring states.

Up to the meeting of the legislature in 1908, Arkansas was one of the four states of the Union which admitted applicants for state licenses to examination without qualification. The licenses granted were not accepted as sufficient in other states, as without qualifications no reciprocal agreements would be entered into by the boards of other states.

By action of the State Medical Board of the Arkansas Medical Society not only the standard of the profession in Arkansas will be raised, but reciprocal agreements will eventually be entered into with all states, excepting only those three which still admit all applicants to examination, as has been done with eight adjacent and neighboring state boards.

Physicians holding licenses from the Arkansas Board will now be permitted to practice upon presentation of the license in the states of Illinois, Indiana, Kansas, Kentucky, Missouri, Oklahoma, Texas and Louisiana.

APPEAL FOR THE TUBERCULOSIS SANATORIUM.

To the People of Arkansas:

The last legislature appropriated fifty thousand dollars for the erection of a tuberculosis sanatorium and thirty thousand dollars for two years' maintenance of the institution.

Unfortunately there was no money in the treasury available for this appropriation, and the board of trustees had to wait to see whether the appropriation would be available in 1910. While waiting, the board solicited propositions for a suitable site and sent the superintendent to visit the leading sanatoria in the United States.

After examining many sites generously offered, the board selected the one offered by the people of Booneville. The tract donated is a thousand acres in the pine ridges three miles south of Booneville. It contains three small farms and an orchard, in all over one

hundred acres of cultivated land. Its altitude is about nine hundred feet, and it is free of malaria. The scenery is rugged and beautiful, the air pure, and the water is good.

Investigations show that the appropriation will be available next year, and the board have arranged to get the amount without delay.

As a result of the visits of the superintendent, the board is in possession of the most approved methods of sanatorium construction, and has the plans of all the leading institutions of the United States to choose from. From these the board has selected these buildings for immediate construction:

An administration building, which includes rest rooms, reading room and solarium, physicians' offices, dining rooms, kitchen and rooms for nurses, attendants and visitors; one ward room for twenty-four patients, modeled on the one in use at the United States Marine Hospital at Fort Lyons, Colorado; two cottages for eight patients each, copied from the Cragmor Sanatorium, at Colorado Springs; four cabins, also copied from Cragmor; two eight-room cottages on the plan of the White Haven Sanatorium, one of Pennsylvania's leading institutions, and five tent houses, modeled on those in use at the government sanatorium at Fort Stanton, New Mexico.

These different houses have been adopted to meet varying conditions, and each represents the best type of its kind.

Contracts for the erection of these buildings are expected to be let by the board on December 28, pursuant to advertisements now being published.

In addition to these buildings, the board intends to install at once a central heating plant, a complete water, sewerage and drainage system, and to build a superintendent's cottage, a dairy and a laundry, and other necessary buildings to make a complete establishment, so that after this heavy initial cost the growth of the institution will be entirely in houses for patients.

This work now planned and furnishing the houses will more than exhaust the appropriation for construction, and only seventy patients are provided for.

This appeal is made to the people to supplement the appropriation by donations with which to erect additional houses for patients. The cost of these houses is, approximately: Ward room for twenty-four patients, \$5,000.00; Cragmor cottage for eight patients,

\$2,500.00; White Haven cottage for eight patients, \$1,500.00; Fort Stanton tent house for two patients, \$275.00; Cragmor cabin for one patient, \$250.00.

Thus it is seen that for \$250.00 one additional cabin can be built; for \$275.00 an additional tent house for two patients can be built, and for \$20,000.00 one hundred more patients can be added, and so on.

In order to take far advanced cases an infirmary will have to be built, and one adequate to the institution would cost at least \$15,000.00. Until that is done, such cases can not be taken, and that is unfortunate, for these should be cared for in the sanatorium, as well as those in which cures may be expected.

The act provides that patients able to pay shall be charged regular sanatorium rates, and these rates will be put at actual cost—something like forty or fifty dollars per month. And the act further provides that anyone unable to pay shall, on the certificate of his county judge to this effect, be received and maintained free.

In these ways the "door of hope" will be opened to every man and women in Arkansas suffering from tuberculosis (except the far advanced cases, and as soon as money can be obtained for an infirmary it will be opened to them also).

In the sanatoria of other states, where climatic conditions are not nearly so good as at Booneville, 80 per cent of the patients received in the early stages of the disease are cured, and even a small percentage of the far advanced (or infirmary) cases are cured.

Our state is filled with thousands of consumptives yet in a curable stage, who can have their lives saved and their health restored if sent to the sanatorium in time.

What is needed now is for the people to raise money with which to build additional houses for these patients. Without additional administrative expense our plant will accommodate four hundred more patients than we have money with which to provide houses now.

A philanthropist of St. Louis, who once lived in Arkansas, has started a subscription with a donation of \$5,000.00. The board has no other large subscriptions in sight, but it is confident that the generous people of the state will aid this great humanitarian cause by contributing from their means funds for the erection of additional houses.

Churches, lodges, benevolent and charitable organizations and public-spirited and generous people are appealed to for donations to erect such buildings which they can afford or desire to add to this institution.

The board will accept memorial buildings, erected by those who wish to commemorate their dead while serving the living. Much money could be profitably spent in adorning the natural beauties of the site. In time we hope to make this the most beautiful place in the state, but what is needed now is additional houses for hundreds of consumptives ready to fill them as soon as they can be built.

These donations will be welcomed at any time, but the most opportune time is before the contracts are let, on December 28, when additional contracts may be let for the houses erected by subscription or donation.

Respectfully,

JOSEPH M. HILL,
President Board of Trustees.

THE PRESIDENT TO THE SUPERVISORS.

President Taft's ringing address to the census supervisors from the Eastern States, in conference at Washington, was intended not only for them but also for all the other supervisors, for the candidates for enumerators' places, the politicians and the world in general. He said:

"I am very glad to see you. You number about a third of the force upon which we have to rely to take the census. I expressed my opinion about the character of your duties when I wrote a letter to Mr. Durand. I did not write that letter just for the fun of having it published. I wrote it to be a genuine instruction to you, and I hope you will all observe it. I know if you pursue it, it will be an easy course for you. If you don't observe it, then I will observe you. I know, of course, there will be pressure.

"Many of you—most of you—have been recommended by congressmen, and it may be that some of these congressmen will come to you and expect, because they did recommend you, that you owe them something in the way of selecting the men as enumerators who will help them in their congressional election. You have got to use sense and discretion. You have got to select the men that you think will do the work, and if you catch them doing po-

litical work I wish you to remove them, just as I will remove you if I catch you doing political work. It is business.

"I am not quarreling with the congressmen. Each man is looking for all the aid he can get to get back into his place, and I am not objecting to the efforts in that direction. But you are the gentlemen that I want to make responsible, through Mr. Durand, for taking this census, and you are the gentlemen I rely upon, and if I can't rely upon you, then I am going to direct Mr. Durand to let me know about it, and I will see if I cannot help him out with somebody else.

"I take great pride in this census. I believe we can make it the best census that has been taken, if we take it as a census, and do not use it and regard it as incidental to something else.

"Now, you are not well paid. This is not a business that is going to enrich any one of you; but it is a business that is worth doing well, and I hope it will turn out so that when the census is taken we shall all have pride in the fact that we were a part in taking it, however humble.

"I am glad to meet you, gentlemen. I would be glad to say this same thing to your fellows, but having this opportunity of delivering a little lecture, I could not restrain myself from doing so. I mean every word I have said."

SECRETARIES OF COUNTY SOCIETIES

You are respectfully requested to read the following communications at the first meeting of your county medical society or otherwise to bring their subject matter to the attention of the medical profession of your county and to secure such action in conformity therewith as may be deemed wise and expedient. It is furthermore suggested that open meetings of county societies be held in December or January or account of the influence on state legislation.

FREDERICK R. GREEN,
Secretary of Committee on Medical Legislation of A. M. A.

OPEN MEETINGS OF COUNTY, DISTRICT AND OTHER LOCAL MEDICAL SOCIETIES.

(Extract from the minutes of the House of Delegates of the American Medical Association, Atlantic City, N. J., June 10, 1909.)

Whereas, The American Medical Association, not only as one of its declared purposes, but by numerous lines of activity, many of them connected with the Section on Hygiene and Sanitary Science, stands

committed to the education of the public with respect to the nature and prevention of disease; and

Whereas, The demand for such popular education with respect to tuberculosis, cancer, typhoid fever and other decimating diseases has become urgent, therefore be it

Resolved, That all county, district and other local medical societies be, and they are hereby, requested to hold annually one or more open meetings to which the public shall be invited to attend and participate, and which shall be devoted to a discussion of the nature and prevention of diseases and to the general hygienic welfare of the people.

It was moved that the resolution be adopted.

Seconded and carried unanimously.

GEORGE W. SIMMONS,
General Secretary American Medical Association.

DR. REED'S RESIGNATION.

To the Auxiliary Legislative Committee of the American Medical Association:

Gentlemen—I beg leave to advise you, and through you the medical profession of your county, that at a meeting of the Committee on Medical Legislation of the American Medical Association, held at Chicago on October 16, I presented my resignation as a member of that committee, to become effective November 15, 1909, or sooner, on the appointment of my successor.

This step has been made necessary on my part, first, because my surgical practice makes it imperative that I decline all engagements that may take me away from my office and operating room, and, second, because the duties of the committee have grown until they can no longer be discharged by any man who cannot devote, if not all of his time, at least more time to them than is consistent with my obligations to my clients.

I must, however, ask for the privilege of tendering a few final words before I can accept exemption from further sacrifices incident to relations that I have sustained with pleasurable devotion for the last seven years. During that time by virtue of its splendid organization, the medical profession has been able to assist in the accomplishment of important reforms. Among these reforms may be mentioned the improved status of the medical profession in the governmental organization of the isthmian canal zone, the reorganization of the Army Medical Corps, the passage of the pure food and drugs act, the recognition by the government of the heroic services of physicians, the defeat and resulting retirement from office of important personages whose influence was inimical to the welfare of the people along lines represented by the medical profession, the promotion of a sentiment in behalf of state licensure in medicine and the preparation of a model act to that end, the education of the public on questions of medical legislation, the development of a strong public demand for the creation of a broader and stronger national public health service, and, finally, the development of an organization by which the influence of the entire medical profession can be brought to bear on great questions of legislation and public policy.

It is to be remembered, however, that all great reforms have been and must be effected to the embarrassment if not actual injury of unworthy interests that are thereby prompted to efforts at retaliation. Such efforts are in progress at the present time. Unworthy and discredited manufacturers of impure, adulterated and misbranded foods, fraudulent drugs and spurious liquors are today conspiring with certain equally unworthy and discredited members of the profession to blacken the

character of its honored leaders, and thereby disintegrate its organization. The paid representatives in Congress of selfish and sinister enterprises, the jealously ambitious members of the public services outside of the medical profession, together with the ignorant and venal pretenders in medicine, are endeavoring to break down the reforms by which they have been adversely affected. In this way the pure food and drugs act is being insidiously annulled by vicious interpretations that are foreign to the purposes of the people and the Congress in enacting the measure. An effort is being made to resubordinate the medical service in the isthmian canal zone to authority that has no technical qualification for the supervision of its functions. Discredited officials are endeavoring to reestablish their power. Ignorance and superculture, allied under the guise of cults, are endeavoring to break down the medical practice acts of the states. Mercenary and merciless enterprises, antagonistic to the welfare of the people, are conspiring to defeat the movement for a national department of public health.

To overcome these antagonisms, to maintain the reforms already realized, and to accomplish other reforms, the necessities for which are flagrantly apparent in our national life, is today the first obligation of the medical profession, both to the people and itself. Its natural guardianship of the public welfare cannot be ignored or evaded. It can discharge that duty only by an intelligent esprit de corps made effective through the instrumentality of far-reaching, well-disciplined and courageous organization. To this end the officers and committeemen of our national body should be unstintingly supported in their altruistic work; the state associations should be strengthened; but, above all, the county societies, the units of strength and efficiency, should exemplify in the highest degree the principles of complete organization and disciplined coöperation.

After a consensus has been reached on any question in any county, every member should become the teacher of the public on that question in his respective locality. The public intelligence thus enlightened, public conviction may find expression in public action if need be at the polls. The medical profession must carry weight not only by the wisdom of its councils, but by its actual power with the people as the natural conservator of their physical welfare and their normal efficiency. In the exercise of its prerogatives the county medical societies should hold open meetings to which the public are invited, and before which questions of profound general concern should be discussed and appropriate action taken. These questions should pertain to every phase of protection against disease-producing influences in water, food, habitation, and personal hygiene. The whole agitation, while not disregarding the defense of existing reforms, should, however, be largely concentrated in the immediate future in behalf of action by the Congress to establish an improved national public health service, a measure which, in every form of practical legislation, I am authorized to state has the cordial support of President Taft.

With deepest gratitude that I have been permitted to act as an humble servitor of my profession in carrying out some of these reforms, and with assurance that nothing but the inexorable demands of my practice and of my obligations in life could induce me to relinquish the work yet to be done by and through the matchless organization of the American Medical Association I am,

Very sincerely,

CHARLES A. L. REED.

60 The Ghoton, Cincinnati, O., Oct. 26, 1909.

News Items.

A conference of state, county and city authorities, members of medical associations and representatives of commercial bodies and insurance companies will be held at Atlanta on Tuesday and Wednesday, January 18 and 19, 1910, for the purpose of devising ways and means to eradicate the hookworm disease and effecting such organization as will best accomplish this object.

The conference is called by the Atlanta Chamber of Commerce and the Georgia State Board of Health, whose officers and directors coöperate.

The program will include a number of addresses the first day and a general discussion the second day, followed by organization for the campaign. On the evening of the first day there will be a public meeting at the Atlanta Auditorium and addresses will be delivered by gentlemen of national reputation. At the close of the conference there will be a reception in honor of the members.

The Rockefeller Commission have been invited to attend and the chairman has written that they will be represented.

If you are an officer or member of a medical association, commercial body, city council, health board or insurance company, please see that your organization is represented.

Statistics announced December 27 by the State Board of Health showed that 188 cases of pellagra were under treatment in Mississippi during the year just closing. An additional twenty-one cases were treated at the state charity hospital at Vicksburg. Ninety-one deaths occurred. The heaviest mortality is reported from Lauderdale county, where, out of forty-three cases, twenty-six deaths occurred.

Personals.

Dr. H. H. Neihuss, of Wesson, councilor of the Fifth District, spent several days in this city during the early part of the month.

Drs. Runyan and Shinault, of this city, attended the Rock Island surgeons' meeting at Dallas, Texas, December 1 and 2.

Dr. Horace E. Ruff, of Heber, spent several days in the city recently, in the interest of the Heber Sanitarium, of which he is secretary.

Dr. Earl Hunt, Clarksville, was a visitor during the early part of the month.

Dr. Leonard R. Ellis, of Hot Springs, attended the recent meeting of the Rock Island surgeons' meeting at Dallas, Texas.

Dr. E. L. Watson, of Newport, Vice President of the State Society, spent December 2 in the city on professional business.

Dr. Mat Dibrell, of Van Buren, was in the city December 8, attending the Dibrell-Goodwin wedding.

Dr. R. L. Saxon, of this city, is spending the holidays in El Dorado.

Dr. H. H. Kirby spent the holidays with home folks at Harrison.

Deaths.

Dr. J. M. Yancy, the oldest practicing physician of Pope county, died at his home in Russellville, December 13, after a short illness of pneumonia. He had been actively engaged in the practice of medicine in Pope county for fifty years.

Marriages.

Dr. John R. Dibrell and Miss Bessie Goodwin, of this city, were married December 8, and will be at home to their friends after January 1.

District and County Societies.

JEFFERSON COUNTY.—The Jefferson County Medical Society met in regular session at the office of Drs. Scales and Duckworth at Pine Bluff, December 7, 1909. The president and vice president being absent, the house was called to order by the secretary and Dr. H. E. Williams elected chairman pro tem. Members present were: Drs. Hankison, Luck, John, Breathwitt, Williams, Stewart, Crutcher, Lowe. Minutes of last meeting read and approved. The committee on fee bill asked for further time, which was granted. The committee on social functions recommended that we have our banquet after the holidays, which met the approval of the society. This being the appointed time to vote on a resolution offered and read at a previous meeting to amend Section 3, Chapter 2, of the By-Laws of our Society, which read, "Agreements and schedule of fees shall not be made by this Society. But at least one meeting," etc., to read as follows:

"Agreements and schedule of fees may be fixed by this Society and at least one meeting," etc. Resolution was adopted as read.

The committee appointed to fix fees for examining applicants for insurance reported as follows:

"We, your committee, offer the following resolutions:

1. Resolved, That no member of the Jefferson County Medical Society shall make an examination for any old line company for less than \$5.00.

2. That where a visit is made for the purpose of examining applicants the regular fee per visit be charged in addition to the office fee.

3. Resolved, That no member of this Society shall make an examination for applicants for fraternal insurance or any other kind of insurance for less than \$2.00 and charge fee for regular visit where visit is made for purpose of examination.

4. Resolved, That no inspection be made, nor name signed nor identification be made whereby an applicant may become a member or beneficiary of any society or insurance company, lodge, or benefit order of any kind whatsoever, for less than \$2.00.

5. Resolved, further, That in making examination we act as representatives of the medical departments of the company for which we examine, and that we at all times protect the interest of the company, and do not pass applicants for insurance who do not fill the physical requirements of the company, as personal favors to any applicant or agent.

Resolution adopted as read.

There was considerable discussion as to whether we should charge \$2.00 per examination for industrial insurance. The argument was advanced that it would prevent some people from carrying insurance who were not able to pay this fee. It was also shown that these industrial insurance companies were making more money than any other and that they would be able to pay this if insured was not. Dr. Luck held that an examination for which a fee of 25 or 50 cents was charged was not worth the paper it was written on, and had just as well be made by some one other than a physician. His opinion was upheld by the society.

Society adjourned till next regular time of meeting.

W. T. LOWE, *Secretary*.

MISSISSIPPI COUNTY. — The Mississippi County Medical Society held a public meeting at the Business Men's Club in Blytheville, Tuesday, December 14. Business meeting at 10:30 a. m.

Program—Symposium on Tuberculosis, at 1:00 p. m. Welcome address, Hon. T. W. Davis, mayor of Blytheville; response, Drs. T. G. Brewer and R. P. Nall; Historical, O. Howton, M. D., Osceola; Etiology, H. C. Dunavant, M. D., Osceola; Microscopic Presentation of Tubercle Bacillus, T. F. Hudson, M. D., Luxora; Pathology, E. E. Craig, M. D., Pecan Point; Symptomatology and Diagnosis, W. E. Turner, M. D., Butler; Special Forms Other Than Pulmonary, J. F. Sanders, M. D., Blytheville; Tuberculosis as Observed in Domestic Animals, V. J. Audre (veterinary), Osceola; Transmissibility, Mortality Statistics and Prophylaxis, C. C. Stevens, M. D., Blytheville; Treatment, R. P. Nall, M. D., Armorel; Needed Legislation, T. G. Brewer, M. D., Osceola. Discussion was opened by Dr. C. M. Lutterloh, of Jonesboro, Ark., and Dr. G. W. Phipps, Caruthersville, Mo.

The essayists were requested to limit their papers to five or ten minutes and to avoid as far as possible the use of such technical terms as the laity would not readily understand. Programs were mailed to the Craighead County, Arkansas, and the Pemiscot County, Missouri, physicians. The object of this public meeting was to awaken the laity to the seriousness of the great white plague; to educate them with a knowledge of its nature, cause, sources of infection, transmissibility, high mortality and how to prevent it.

O. HOWTON, *Secretary*.

LONOKE COUNTY.—The Lonoke County Medical Society met in Lonoke Monday, December 6, at 2 p. m., in the office of the president, Dr. J. R. Cunning. Members present: Drs. Brewer, Benton, Bowers, Cunning, Corn, Calahan and Southall. The meeting was called to order by the president, reading of minutes of previous meeting approved, after which several cases were reported and discussed. A motion was made and carried that all non-graduates of the county be invited to attend these meetings and participate in reading papers and discussions in order that the progression of the medical fraternity may be advanced in this county.

This being the regular meeting for the elec-

tion of officers for the year 1910, the following were elected: President, Dr. S. A. Southall, Lonoke; vice president, Dr. A. D. Ward, England; secretary-treasurer, Dr. F. Corn, Lonoke; assistant, Dr. S. S. Beaty, England; delegate to State Medical Society, Dr. Henry Thibault, Scott; alternate, Dr. E. A. Calahan, Carlisle. Board of Censors: Dr. J. F. Brewer, Kerr, in the place of Dr. Stovall, deceased. New member, Dr. T. E. Benton, Lonoke. There being no other business, the meeting adjourned till first Monday in January, 1910.

S. A. SOUTHALL, *Secretary.*

PHILLIPS COUNTY.—The Phillips County Medical Society met in regular session Tuesday, November 2, President Bean in the chair.

Pellagra was the subject for discussion. Six cases were reported in Phillips county, with two other probable cases. After adjournment the members went in automobiles to the county asylum, where two cases of pellagra were exhibited and examined. The society was then entertained at luncheon by the secretary.

H. H. RIGHTOR, *Secretary.*

MARION COUNTY.—Reorganized their society December 4, and elected Dr. J. I. Thompson, of Yellville, president; Dr. Robert M. Elton, of Bruno, secretary and treasurer.

PULASKI COUNTY MEDICAL SOCIETY, at their meeting December 13, elected the following officers for the ensuing year: M. D. Ogden, president; Milton Vaughan, vice president; Robert Caldwell, treasurer, and A. L. Carmichael, secretary.

SEBASTIAN COUNTY MEDICAL SOCIETY, at their regular meeting December 14, elected the following officers: D. R. Dorento, president; H. Buckley, vice president; Clark Wood, secretary, and C. W. Garreson, treasurer.

Book Reviews.

Handbook of Diseases of Rectum—By Louis J. Hirschman, M. D., Detroit, Mich., lecturer on Rectal Surgery and clinical professor of Proctology, Detroit College of Medicine; attending proctologist Harper Hospital, etc. One hundred and forty-seven illustrations, mostly original, including two colored plates. C. V. Mosby Medical Book and Publishing Company, St. Louis, Mo.

The author, realizing the deficiencies of the

general practitioner in proctological work, has presented this little book to the great mass who were as unfortunate as himself in their college training in this special field. All the subjects usually to be found in such a treatise are presented in a clear and conversational manner, and are from the standpoint of what the general practitioner should know and do. Insistence is made upon early and thorough examination, and in order to make a correct diagnosis, many good illustrations are employed for this purpose. New surgical methods are described in those conditions where they have been found of value, and the technique of operative measures under local anesthesia have been made as simple as possible. Only those conditions which are amenable to office treatment have been discussed.

The chapter on dysentery was written by Dr. John L. Jelks, of Memphis, an authority on that subject. Dr. George W. Wagner, of Detroit, has written the chapter on the examination of the feces.

This little book will not supplant the usual text-book on this subject, but it will be found very valuable and handy to consult. We very heartily commend it to our readers.

Diseases of Infancy and Childhood—By Henry Enos Tuley, M. D., Louisville, Ky., professor of Obstetrics, medical department, University of Louisville; visiting physician, Masonic Widows' and Orphans' Home; secretary Mississippi Valley Medical Association. Cloth, \$5.00. Half leather, \$6.00. Southern Medical Publishing Company, Baltimore, Md.

This book is just from the press, and is in many respects an admirable one, especially for its illustrations, clearness of diagnosis and treatment. The author has made a book that will fill the needs of the student and busy practitioner.

The language of the author is concise and clear, while his arrangement of subjects leaves nothing to be desired.

The section on infant feeding is good, and his work concludes with a resume on the subject of milk modification, which is of the greatest importance, especially for its convenience in presenting it as he does in formulæ. It is a pleasure to go through a text-book bearing the impress of a single writer.

The author working singly has been able to give each subject discussed the amount of space commensurate with its importance.

D. R. H.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS.

1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Nelhuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Bufo	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarrall	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunningham	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Osceola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Ouachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marvell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
Saline	J. M. Phillips	Benton	C. Prickett	Taskwood
Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Summers	Elm Springs	Nina V. Hardin	Fayetteville
White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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HOTEL MARION CO., *Proprietors*

HOMER WILSON, *Manager*
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HEADQUARTERS FOR ALL CONVENTIONS

In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

THE JOURNAL

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No. 8

Original Articles.

EXTRAUTERINE PREGNANCY.*

W. V. Laws, M. D., and William Chestnut,
M. D., Hot Springs.

"Extrauterine pregnancy is one," says Williams, in which "the fertilized ovum is arrested at some point between the ovary and the uterus, and there undergoes more or less development."

The condition was formerly thought to be most rare—so much so that as recently as thirty years ago, reports of only five hundred cases could be collected from the entire literature. The progress, however, in all lines of surgery, the greater frequency of abdominal operations, and improvement in the means of diagnosis, have shown the condition to be relatively frequent and its recognition much easier.

The etiology is obscure. Many interesting theories have been advanced to explain tubal pregnancy, but no one theory has been advanced which will fit all, or even a large percentage, of cases.

Of these theories, three stand out prominently: (1) "Conditions which mechanically interfere with the downward passage of the ovum;" (2) "conditions resulting from inflammation of the tubes, ovaries or pelvic peritoneum," and (3) "developmental conditions favoring decidual formation in the tubes." (Williams.) The first two of these theories are the most important. As examples of mechanical interference to the passage of the ovum may be mentioned peritoneal adhesions, tumors compressing the lumen of the tube or diverticula in the lumen

of the tube, in which the fertilized ovum finds lodgment. That inflammatory theory explains much is upheld by numerous facts. The cases to be reported exemplify this; and, while no theory is adequate, this, perhaps, has the most weight.

A discussion in detail of all the forms of extrauterine pregnancy is not within the compass of this paper. It will be well to state, however, that true ovarian pregnancy does occur, though exceedingly rare.

An idea exists, too, that there may be a primary abdominal pregnancy, but this view is erroneous. A careful study of reported cases has shown that in all the pregnancy is secondary. What has occurred is this: An incomplete abortion through the ampullar end of the tube occurs; the fetus lives, as the placental circulation is intact, and undergoes further development, giving rise to a secondary abdominal pregnancy. In such cases the adhesions are so numerous and dense, and the organs are so much displaced and distorted, that it is most difficult to recognize the primary site of implantation. Careful study reveals, however, that it has always occurred in the tube.

Tubal pregnancy may occur in three portions of the tube. Three per cent are present in the interstitial portion of the tube. The isthmie and ampullar varieties are the most frequent. Most authorities give the ampullar variety as most frequent, while Williams thinks the isthmie the most common. The difference in percentage between these two kinds is perhaps slight.

Tait, quoted by Williams, believed rupture before the end of the twelfth week to be almost the universal termination of tubal pregnancy, but recent studies show that rupture occurs in about 25 per cent of the cases, while abortion occurs at an early period in 75 per cent of the cases (quoted by Wil-

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

liams). Martin, quoted by Williams, says: "Abortion is the general rule, spontaneous rupture occurring only in those cases in which occlusion of the abdominal end of the tube precludes the possibility of an abortion, or in which, the ovum being inserted in a hernia of mucosa, burrows directly through the tubal wall."

The symptoms, unfortunately, do not give a clue to the condition; usually few or no symptoms appear before abortion, or rupture. The patient believes she is pregnant and has some of the usual subjective and objective symptoms. She has slight pain in one or the other ovarian region; or, in some instances, whatever be her symptoms, she may not be aware that she is pregnant.

Suppression of the menses is not constant (43 per cent), but in the remaining 57 per cent the menstruation is not a real one, but is due to an endometritis, or to the fact that the dilated vessels of the uterine decidua are not covered by the fetal tissue. (Williams.)

Often the first manifestation of abdominal pregnancy is an intense lancinating pain in one or both ovarian regions, followed by faintness, collapse, or signs of increasing anemia. If the patient rallies promptly, an abortion has probably occurred; but if the collapse deepens, the face becomes pallid and the pains in the abdomen continue or increase in severity, rupture has taken place and death is imminent.

Authors differ in the stress they place on uterine hemorrhage; its presence is of the utmost importance, and, under diagnosis, further reference will be made to it.

Diagnosis—The diagnosis is rarely made before abortion or rupture. If, however, a patient presenting some subjective and objective signs of pregnancy be examined for any reason; if, too, the patient has been sterile for a number of years, or has never given birth to a child, and upon examination the uterus be somewhat softened and enlarged, and there be present a unilateral tumor, which is tender, soft and doughy, and corresponding to the size of the supposed pregnancy, the tumor is quite likely to be tubal pregnancy.

If to this there be added a history of pain in the ovarian region, or the discharge of a decidua cast as a whole or in part, the diagnosis may be made with certainty.

It would be difficult to find a case as represented; patients presenting themselves to a

physician usually have symptoms of abortion or rupture.

"The diagnosis," says Kelly, "rests upon the history and examination. Either may suffice, but both afford a greater degree of certainty."

The following points, enumerated by Kelly and Williams, render the diagnosis easy:

1. Patient has had no children, or has had one or more children and been sterile six, eight or ten years.

2. Cessation of the menses, morning sickness, fullness of breast, enlarged uterus, discoloration of vagina, etc.

3. History of preceding pelvic inflammatory diseases. All of the cases to be reported exemplify this. It is a point well worth noting, and seems to bear some relation to the condition.

4. Tumor to the right or left of the uterus, which is elastic and painful—the uterus being enlarged to the size of two, three or four months' pregnancy.

5. The decidua vera, as a cast or in parts, is discharged in the first few months of pregnancy. With this there is a history of irregular bleeding. The patient, who has previously menstruated regularly, passes a period. Fifteen days to three months afterwards she begins to bleed at irregular intervals, and often for a protracted period. The patient believes the bleeding to be the onset of menstruation, but its irregularity and persistence alarms her, and she consults a physician. In two of the cases to be reported this feature predominated, and its importance cannot be overestimated.

6. Tumor to one side, which patient herself may discover.

7. Recurring pain in one or the other ovarian region. When abortion occurs the pain becomes agonizing, the patient becomes pale and collapses. If the abdominal pain persists and the collapse deepens and the signs of anemia increase, rupture has occurred. If, however, the patient recovers from the collapse and improvement is rapid, abortion has occurred. This train of symptoms is of the utmost importance, and from them alone the diagnosis is certain.

8. The pregnancy may go on to term without patient suspecting the pregnancy to be abnormal. It is needless to say that any two or three of these points suffice for the diagnosis.

When rupture occurs, the symptoms are as have been explained. When abortion oc-

curs, secondary symptoms may arise. The hemorrhage may go into the sac, or into the sac walls, into the lumen of the tube, between layers of the peritoneum, or into the lumen of the tube, and thence through the fimbriated end of the tube into the abdominal cavity. Under the last condition provided the fetus is alive and the placental circulation intact; a so-called abdominal pregnancy results. On the other hand, hemorrhage may cease quickly and the products of the abortion be absorbed, or the hemorrhage may be so great, or may continue slowly for some time, leading to the formation of the hematocele of the older writers.

Three conditions are likely to be confused with tubal pregnancy: First, an abortion; but in this the passage of the ovum, the absence of the lateral tumor and the less intense character of the pains aid in the differentiation. Secondly, salpingitis and pelvic inflammatory disease. In this condition fever and leukocytosis is marked; the tumor is often bilateral, and the uterine hemorrhage is lacking, as well as the symptoms of pregnancy. The most expert practitioner may fail, however, in differentiating between pus tubes and tubal pregnancy, because abortion or rupture may occur so early that the symptoms of pregnancy or of uterine hemorrhage may be wholly wanting. The temperature, too, may be high, and in addition a pelvic inflammatory condition may be coexistent. The last two mentioned were present in Case 2; the pelvic inflammation was present in Case 3. The third condition is appendicitis; the higher seat of pain, the absence of all symptoms referable to the uterus, the typical onset of an attack of appendicitis usually differentiates it.

Space forbids any reference to the operative treatment. Let it suffice to state that the operation is imperative, and every hour's delay increases the danger.

No claim to originality is made with regard to what has been hitherto read. The comments and arrangements are our own, but the accounts of Williams in his "Obstetrics" and Kelly in his "Medical Gynecology" and in his volume of "Operative Gynecology" have been closely followed. We have tried to lay stress on certain features of the diagnosis. Let us now turn to a report of three cases, which we shall give without comment, in that the points they illustrate have been brought out in the preceding account.

Case No. 1—Family history, negative; age, 27; patient's history, negative.

Menstrual history: Menses regular up to a few years ago. The patient had one miscarriage several years ago. For several years preceding the onset of the present illness she had marked menorrhagia and occasionally a menorrhea. For this she had taken the Viava treatment. From this evidence it may be assumed that she had some pelvic lesion.

History: For five weeks preceding the onset of the acute illness patient had a continual menstruation, and on several occasions passed a portion of uterine cast. One morning while patient was getting breakfast she was seized with a severe pain under the right costal margin. With this she complained of tightness on the right side, due, evidently, to lack of freedom in respiratory movement. The pain, at first localized under the right costal margin, soon became general over the abdomen, and later shifted to the lower portion of the abdomen. With the pain there was nausea and vomiting and extreme collapse. The patient thought her illness due to rheumatism, but her attending physician, finding symptoms of pregnancy, a typical menstruation and the preceding symptoms, at once diagnosed tubal pregnancy. One of us saw the patient at 2:30 p. m. She was still suffering from shock and was very restless. There was some pain and tenderness over the right side. Another physician, who happened to be present, thought the trouble to be appendical in origin, owing to the high seat of pain. The patient was removed to a sanatorium for operation. By the time of operation she had somewhat recovered from shock. When the abdomen was opened about three pints of clotted blood was removed. The right tube and ovary were removed, and all bleeding points that could be discovered were ligated. There was present a right tubal pregnancy of about two months' duration, which had ruptured. Free iodoform gauze drainage was made. The patient was infused as she was put to bed. Saline solution was given, per rectum, and other remedies as indicated. The patient rallied somewhat, but free oozing continued and the patient died thirty-six hours after operation.

Thanks are due Dr. Orvis Biggs for the history of this case.

Case No. 2—Family history, negative; patient's history, negative.

Menstrual history: Menses began at the age of sixteen, and up to the present time

have always been regular. Periods have lasted five days, as a rule. The patient has never had any children. Fourteen years ago she had a miscarriage. Following this she had acute pelvic inflammatory disease, which her physician at that time diagnosed as acute ovaritis and salpingitis on the right side. The patient recovered from this illness and remained well for a period of ten years. During the past four years her health has been poor, though she has been up and about. None of her symptoms, however, were referable to her pelvic organs.

The patient missed her period on the 9th or 10th of December, 1908. At this time she began to complain of pain in the lower abdomen, more on the left than on the right side. Ten or twelve days after the time her period was due the patient began, as she thought, to menstruate. The bleeding was excessive, and lasted ten or fifteen days. It subsided for a few days and then began again. This bleeding, from now on, was almost continuous, and had marked effect on the patient. She now became weak and blanched, her hemoglobin being but 52 per cent when she came under our care, February 17, 1909. With the onset of the bleeding, the pains in the left lower quadrant became more intense, and, while they were intermittent in character, they continued up to the time of operation. The patient had no idea she was pregnant, and presented no objective signs of pregnancy. She had not suffered from nausea; her breasts were not enlarged, though perhaps this feature was absent because of the weakened state of her circulation. On examination, she showed marked signs of anemia. Her face was blanched, as was her entire skin. She had the peculiar lemon tint of a patient with pernicious anemia. Her pulse was weak and rapid, and her temperature was from 101 to 103 degrees constantly. The abdomen was full in the lower portion, but was not resistant to palpation. There was tenderness over the whole lower abdomen, more marked on the left side, but there was no muscle rigidity. A mass the size of a fist could be felt on the right side, occupying the position of the right tube. On the left side an indefinite mass could be made out, but the patient resisted palpation, and nothing could be determined accurately. The pelvic examination showed a uterus softened and enlarged to the size of a two months' pregnancy. On the right side a large mass occupying the site of the right tube could be

made out, while on the left side a boggy, indefinite mass could be determined. The left side was much more tender than the right. Taking into consideration all the facts of the case, a diagnosis of tubal pregnancy was made.

Operation: The usual midline incision was made and a good exposure gotten. The uterus was seen just emerging from the pelvis, and enlarged to the size of a two or three months' pregnancy. On the fundus was seen a subserous myoma about the size of a walnut. The mass on the right side was seen to be the remains of an old inflammatory condition. The tube was densely adherent, and was the seat of a hydrosalpinx. The appendix was adherent to the uterus by old adhesions, and subsequently its lumen at the base was found occluded in consequence of an old appendicitis. The left tube was not visible, being covered by coils of intestines, to which it was adherent. When these adhesions were broken up a highly vascular mass was found, and this, from its character, was taken to be tubal pregnancy. In removing the left tube it ruptured, and the embryo lying in its sac was found in an old blood clot. Abortion had evidently taken place, though the hemorrhage was confined to the sac walls of the tube, no blood being present in the abdomen. This view is upheld by the fact that the embryo does not correspond to the size of the supposed pregnancy. The right tube and appendix were removed. As hemorrhage was free, drainage was made through both abdomen and vagina. The patient has made an uninterrupted recovery.

Case No. 3—Family history, negative. Patient's history: Age, 29 years; has been married for four years; one child three years old, living; one three months' miscarriage, two years ago. At birth of first child, patient sustained laceration of cervix and perineum, which was repaired by one of the writers. July, 1907. At the same time a Montgomery Gilliam shortening of the round ligaments was done for a retroverted uterus. Patient was entirely relieved by operation of backache and pain at menstrual period. On January 1, 1909, patient began to experience pain in the left ovarian region; she missed her menstrual period in February, and in March she had a severe hemorrhage for nine days, and evidently a uterine cast was passed at this time. On April 1, 1909, shortly after arising in the morning, she was taken with a

severe pain in the left ovarian region, followed with nausea and vomiting and extreme collapse. A physician was called, who administered two doses of morphia hypodermically, but did not return to see the case. A second physician was called, who continued to administer narcotics. One of the writers was called to see the case at 11 a. m., April 2, 1909. The patient at this time had a pulse of 120, temperature 100 degrees, and great tympanites and inability to move the bowels. The patient was removed to a sanatorium in an ambulance. The trip did not seem to change the symptoms to any marked extent. Under medicated enemata and physostigma salicylate, hypodermically given, the bowels moved and the tympany was slightly relieved. Patient's pulse came down to 100 per minute. Operation was postponed until next morning.

Operation: The incision was made through the left rectus muscle to the outer side of old incision scar; a good exposure was gotten. The uterus was seen suspended by the round ligament. A pint and a half of clotted blood and broken-down tissue was bailed out of pelvis, when the rupture in the left tube was plainly visible. The left tube and ovary were ligated and removed and all active hemorrhage controlled. Gauze drainage was placed in lower angle of wound and abdomen closed as quickly as possible with through-and-through silkworm gut sutures. Owing to the very bad condition of the patient, she was given hypodermoclysis while on the table, and saline, per rectum, was continued for six hours, according to the Murphy method. Patient gradually recovered from the shock, and made an uninterrupted recovery.

Whether the shortening of the round ligaments, with the consequent puckering of the broad ligament, acted as a causative agent in producing this case of ectopic pregnancy is an interesting question.

ECTOPIC GESTATION OR EXTRAUTERINE PREGNANCY, WITH A REPORT OF A CASE.*

G. E. Cannon, M. D., Magnolia.

The purpose in writing this article is to bring this rare and serious condition before you for two reasons. One reason is because of its seriousness, which may be quickly re-

lieved by proper procedure, and another reason is because it is often not recognized.

By ectopic gestation we mean that pregnancy has taken place outside of the uterus—in the tubes, ovary, or some adjacent structures. The majority of cases occur in some part of the fallopian tubes, and as the tube cannot hypertrophy sufficiently for the fetus to grow many weeks, we have rupture, with serious consequences following. The fetus may be located so near the distal end of the tube that it may be expelled at the end of the tube into the peritoneal cavity without rupture of the tube. It may be so near the uterus as to be expelled into the uterus and pass off the right way, but more often it is far enough away from each end to cause a rupture or breaking of the tube near the placental site. The one presented, you will notice, is nearer the distal end, yet we had a ragged rupture, with great hemorrhage.

A diseased condition of the tubes, which allows the passage of the spermatozoa outward from the uterus, but which prevents the female germ or the impregnated ovum from traveling into the uterus, is the cause of this; and when conception takes place the lodgment and beginning growth is outside the uterus, as designated above. The condition occurs mostly in multiparas, and is usually found in cases that have been sterile some years, though not always. The case presented had a child fourteen months old.

That great enemy of womankind, gonorrhea, is responsible for most pelvic troubles. It is an alarming shame to see how this evil fills the gynecological wards of our hospitals and wrecks and ruins our happy homes. It is one of the greatest evils of our nation. Not until we medical men have waged a bitter warfare against this monster evil will we have done our duty to ourselves, womankind, and our nation. Put men on the same standard with women and we will have less of this evil, which brings on such calamities as this. This is one of the greatest questions in preventive medicine.

The positive symptoms of this trouble are few, but distinct. A woman has missed one or two periods, with other symptoms of pregnancy. Colicky pains of a peculiar character occur at irregular intervals. She may have a hemorrhage for a few days, greater in amount than the regular menstrual flow, and it will be repeated in a week or ten days. It is more likely that she will have a slight bloody discharge continuing for several days.

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Upon examination, the uterus will be found slightly enlarged with a soft cervix, and generally a mass may be felt on one or the other side, and somewhat behind the uterus. Despite all these symptoms, we rarely ever diagnose ectopic gestation until rupture occurs, which is more often about the end of the second month than any other time. If we could diagnose all cases and operate before rupture, about all cases could be saved; but under the present methods fully 5 per cent die. The positive signs after rupture are: Pain, a rapid, weak pulse, subnormal temperature and blanched features, showing an internal hemorrhage. In a case where you have had retarded menses, with other signs of pregnancy in a woman usually above thirty years, whose health has been below par, the diagnosis is rather hard, because we see so few cases, but if we will keep these four cardinal points in hand, we can make a diagnosis. Dr. Joseph Price told you last year that he had seen 500 of these cases, but when we know that only one case occurs in 6,000 to 10,000 pregnancies, not many of us can see many cases, though I believe if all cases were diagnosed we would have a much greater number reported.

The treatment is always surgical, and should be done without delay. It is supposed that Jacob Nufer did this operation upon his wife in 1500. Dr. William Bayne, of Virginia, was the first one that we know performed it, and Ephram McDowell, about nine years later, gave to the profession the operation. Veist, of Berlin, performed the operation after a definite diagnosis in 1885.

A short report of the following case will likely be of interest and impress some points brought out above.

Mollie H., colored, aged thirty-seven years, gave a history of two miscarriages at three and six months of gestation and three confinements at full term. Her baby was fourteen months old when she became pregnant at this time. At about the end of the fifth or sixth week she began to bleed a little. It continued for a week or more, when pains began and she consulted me. An examination showed no dilation of the cervix, but the uterus was enlarged and a mass was felt to the left and behind, which was supposed to be a pyosalpinx. The pains kept up for several days; sometimes they were severe for a while, and then she would be easy for several hours. It looked like a threatened abortion, and yet

it did not look like one, because the pains were different. The vagina was tamponed for twelve hours, with no benefit. As the hemorrhage was very slight all along, we decided it was either a dead fetus or a case of extrauterine pregnancy. A positive diagnosis was not made until rupture. On the morning of January 31, 1909, she gave a history of a bad night. She had almost fainted two or three times, and her temperature was 96, pulse 160, very pale, and complained of great dyspnea. Her husband was told that she had a ruptured extrauterine pregnancy, and no treatment but operative would do her any good. While I called another physician to verify the diagnosis, we obtained her consent to operate. We secured a room in the newest negro house in the neighborhood and hastily prepared for the operation. To make more positive of the diagnosis, when she was placed on the operating table the uterus was sounded with a dull curette and search made for any present fetus or remains of any that might have been expelled. As soon as the abdomen was opened in the median line a great quantity of blood began to flow away. The mass you see, consisting of ovary and ruptured tube, was brought up, ligated and cut away, and more than one quart of blood was scooped out and washed away from the abdominal cavity. When all clotted blood seemed to be out, a quantity of normal saline solution was left in the abdomen. Being fearful of infection, a cigarette drain was left in the lower part of the wound. The fluid left in the abdomen caused the dressings to become so soiled as to require redressing in twenty-four hours, when the rubber tube of the drain was removed, leaving the gauze in till the fourth day. The sutures, which were through and through silkworm gut, were removed on the eleventh day. A saline solution slowly put into the rectum for some hours after the operation was of great help. The recovery was uninterrupted and the temperature never went above 99 $\frac{3}{4}$, and that was when the bowels needed moving.

The points I wish to bring out in this case are: Be careful of your diagnosis. When it is made, operate without delay. Cover the dirt in the improvised operating room with bichloride sheets, if necessary. Be perfectly clean in every respect, and operate as rapidly as possible to do careful work, and you can save lives that would be snuffed out by a delay.

A CASE OF EXTRAUTERINE PREGNANCY.*

W. F. Smith, M. D., Clarksville.

This is a case of abdominal gestation, in which the fetus was carried four months beyond the term of pregnancy. The history of the case follows:

Mrs. A. McC., aged 27; has been married ten years; has one child, born October 24, 1898; has had no miscarriages; menses irregular at times; general health is good; family history negative.

I first saw this patient February 1, 1908, being called in consultation by the attending physician. The patient thought that she ought to have been confined January 25, and at this time gave no unusual facts concerning the case, being simply worried on account of going over her time. There was a protrusion of a soft, flabby mass in the vagina at this time that soon disappeared. I next saw the patient May 21. She was anemic and emaciated, and the abdomen was greatly distended and very tense on account of the pressure from within. Upon questioning her closely it was learned that about the middle of May she had several sharp pains in her left side, over the region of the ovary, but these pains did not last long. Again, in August, she had what she described as a "funny" feeling, accompanied by keen low-down pains, and was in bed about one week, but got up and had no more trouble until about the 1st of December, when she went to bed, where she remained for seven months.

The abdomen was opened in the median line, and about three and one-half gallons of a dark brown fluid escaped, containing a great deal of partially decomposed shreds of flesh from the fetus and placenta. The cord had parted near the body of the fetus, which was lifted out, while the placenta was found to be adherent to the left tube, near the uterus, firmly attached and beginning to calcify at the point of attachment. The cavity was drained and washed out with a large quantity of normal saline solution. Several stiches were put in the abdominal incision, but a large opening for drainage was left, into which was packed several long strips of gauze. The cavity drained freely, the discharge being very offensive from the beginning. The gestation sac was not disturbed

in any way. The patient made an uneventful recovery. The discharge persisted for about three months, when the opening closed. At no time was there any elevation of temperature.

The fetus was perfectly formed and weighed eight and one-half pounds. The patient said that she felt life up until about January 15, ten days prior to the expiration of the term of pregnancy.

From the attachment of the placenta and the early rupture, it is probable that the placenta was implanted on the superior wall of the tube, which would cause less injury to the placenta when the rupture did occur, and the hemorrhage would be less, as would also be the jeopardy of the lives of the mother and the fetus.

DISCUSSION.

Dr. Dorr—I have not much to say on this subject. There are some things I might speak of, but nothing new. In regard to the probable cause, I agree with Dr. Laws. Nobody knows anything about it—they only think they do. There could be no one cause assigned. It has been shown recently that after sexual intercourse between human beings, that in three hours the spermatozoa go everywhere, and in reality extrauterine pregnancy is the rule. Impregnation takes place in the tube, as a rule. I don't think there is any doubt about that. It is the meeting of the ovum and the spermatozoa in the tube as it comes down and for some reason does not get out. That causes extrauterine pregnancy. In regard to ectopic abdominal gestation, I do not think anybody knows anything about it. I do not agree with the theories advanced at all. I don't think our knowledge is well defined on that point. I operated on a case last year of seventeen months' duration, where the placenta was not attached to the tube. The fetus was not in the tube. Dr. Dickson, of Paragould, reported a case of very nearly the same condition. No injury to the tube; not attached to the tube. I know of other cases of a similar kind. I don't think anyone knows anything worth relating in reference to the cause.

Mayo gives us this explanation. I don't know whether that is original with him or not: "The reason you have tubal pregnancy is that the spermatozoa is motile and the ovum is non-motile. The tube being lined with ciliated epithelium, whose function it is to carry the impregnated ovum to the uterus,

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if the cilia is destroyed by disease it is not replaced. Therefore, it cannot perform its function, and the fertilized ovum becomes lodged at this point. You have the beginning of tubal pregnancy."

In regard to operating all cases: There are cases which are not operative. Some of them will abort and nature will take care of them. I have seen many of them where there was no use in operating. Another point I want to call attention to: The tumor is not always on one side or the other of the uterus. It may be in the cul-de-sac. It may be in the anterior or posterior cul-de-sac—usually a soft, bulbous mass. Another point in the diagnosis of these cases: If the gestation is of four or five months' standing, by palpation of the tube you will discover the bones of the fetus. That should settle the diagnosis beyond the question of a doubt. In the case reported by Dr. Smith, of Clarksville, I don't think it is necessary to elevate or lift out the sac. They might have performed the operation four months before.

Dr. Smith—I said I lifted out the diseased fetus and left the gestation sac.

Dr. Dorr—You left that protruding?

Dr. Smith—No, sir.

Dr. Dorr—There was no need to let the sac remain. You could have removed it when you saw that it did not produce any hemorrhage. The patient would have gotten well a good deal quicker if you had taken it out. In those cases where the child is alive, or has been dead quite a while—that is, to term, or about to term—there are three ways to proceed. One is to trim the sac and stitch it to the walls of the abdomen and let nature throw it off. The other way is to let them go for four or five weeks after the death of the fetus, and then you can remove it, because you will have no hemorrhage. The third way is, if this membrane is too short to stitch it to the walls of the abdomen, you can take it out, but before doing so, ligate the uterine arteries, also the arteries located right at the cornea of the uterus. Put in a hot gauze compress; leave it in forty-eight hours, then take it out.

Dr. Snodgrass—Referring to Dr. Laws' remarks in regard to diagnosis, I do not see how it is possible for any man with a reasonable amount of experience to fail to recognize this condition. We should not feel dubious, especially when pus is present. It seems to me he ought to be able to diagnose a case very readily. If there is pus present it will sup-

purate. If pus is produced it will present symptoms which the practiced eye will not fail to discern. It presents more of the pathological conditions. You find tenderness in different localities and so-called pus abscesses. You always have fever. I have seen perhaps eleven cases of ectopic gestation, and I have tabulated the last eight cases I treated, and I believe a majority, or at least 50 per cent, of the cases of ectopic pregnancy take care of themselves without having given us any clue to the child which they have carried. It depends upon the location in the tube where the rupture takes place and on the amount of hemorrhage that takes place. I remember a number of cases. I have had four in my practice altogether. I have seen the result of ectopic gestation in the tube which had never been recognized before, when the patient was operated for some other trouble, and a so-called paracyesis was discovered, which, I think, perhaps started from an ectopic pregnancy or lesion referable to that condition, which rapidly developed a tumor after the hemorrhage takes place. You make a doubtful diagnosis, say, between ectopic pregnancy, pus tube and a tumor. Patient has acute agonizing pain in the pus tube. You have extreme tenderness; you have elevated temperature and recurring pulse. In these ectopic pregnancies after the hemorrhage takes place you have a collapse, and a few of these cases will die with the primary hemorrhage.

As I said before, I think 50 per cent will take care of themselves, without any surgical operation. If you take out these so-called pus tubes that you find in women who have borne a good many children you will find that they have no knowledge of ever having had any specific disease. You find that there has been a blood clot in the tube; and I do not know of anything else that would produce this blood clot except rupture or ectopic condition. There is very little likelihood of blood draining from the uterus navigating back into the tube. Most of these cases are about ready for early abortion through error. I operated upon one two weeks ago that had been curetted twice by a very competent physician. He first curetted her, thinking she had had early abortion. The flow continued from the tube without any diminution. He curetted her again in about ten days. It is impossible to effect a cure by this sort of procedure. One night after she had retired she had acute pain in the abdomen and collapsed and came very near losing her life. I oper-

ated her the next day and found quite a good deal of blood.

If we will watch these cases closely enough, especially the ones where you suspect early abortion, if you cure her for early abortion there will surely be some hemorrhage for several days, with little shreds of pus. If he will look out, especially if he sees the case early enough, or after missing the period, say three to six weeks over her period. I have seen a great many of them carried to the sixth week. One case Dr. Laws reported the woman as feeling "very queer." I don't agree with him where impregnation takes place. I don't think the impregnation takes place on the body of the tube or in the cervix uteri. I don't see any good reason for that. If it did we would have a great many more of them than we do. I believe that impregnation takes place where the ovule comes in contact with the spermatazoa. They will stick to it.

If there is any obstruction in the fallopian tube which prevents the ovum coming down into the uterus, where it can be taken care of properly, the spermatozoa, being mobile, penetrates the tube and the impregnation takes place there, where it comes in contact with the ovum. If you watch the ovule development, taken in connection with our studies in embryology, you will find that the growth is very rapid after impregnation takes place. Before that takes place, of course, the spermatozoa must penetrate the abdominal cavity, and before they can do any harm they must come in contact with the ovule, and before they can have a beginning they must perforate the capsule. They seem to have an affinity for each other, for in some way the capsule is attacked and in some manner unknown to us impregnation is accomplished wherever the spermatozoa comes in contact with the ovule. If the tube is diseased it affords a lodging place for the ovule as it passes through on its way from the ovary to the uterus, and, as a matter of course, it would take place there where the elements meet. If it takes place in the abdominal cavity it has got to find a niche somewhere for an attachment. It would have to grow and develop, and to do so it must find a favored location for lodgment in order to receive nourishment. There is very little nourishment given to the ovule from the material within its capsule at the beginning of its gestation. It is soon exhausted, and the embryo must seek and find a more favored location. The location hav-

ing been selected, there is bound to be something to bind it to that position.

Dr. Runyan—Because an occasional tubal abortion occurs and the patient gets well is not a very good reason why we should attempt to teach here today that it is a good idea to let a case of tubal abortion alone and not operate. I have known women to have pus tubes and die of something else, but for that reason I would not say that because those pus tubes did not kill that woman those pus tubes should be allowed to remain. I don't believe Dr. Snodgrass would say that all pus tubes are not better out than in. I think that all cases of ectopic gestation, as soon as diagnosed, should be operated upon. A tube that causes ectopic gestation one time because of that diseased condition is likely to cause another ectopic gestation if that patient is allowed to progress and happens by some chance to get well of the first ectopic pregnancy. I think it would be well to forestall a recurrence.

I have seen cases that I did not diagnose after the first hemorrhage as ectopic gestation. Will we let that patient alone to recover from the shock for a few days to see if she has a second hemorrhage? I want to ask Dr. Snodgrass if he can tell me when the patient has had her last hemorrhage if that case is over simply because they have had tubal abortion.

I want to emphasize this fact, gentlemen: That in every case, after a diagnosis in initial ectopic pregnancy, whether the patient was suffering very much at the time or not, I would most certainly operate.

Dr. Snodgrass—Dr. Runyan seems to be laboring under a misapprehension. I did not advise you to let your ectopic pregnancies alone to see if they would take care of themselves. I said that at least 50 per cent of our so-called abdominal or tubal pregnancies would take care of themselves and you would never know it. You do not have to make a diagnosis, because your attention is not attracted to it. He will not recognize it unless he finds a condition in the tube that will lead him to believe that such a thing has occurred. If the embryo dies early, before it stretches out and enlarges the tube it will soon be destroyed if the attachment is not perfected. The ovule must be attached to the circulation in some way to get nourishment. Those things die forthwith if not properly attached.

Dr. Sweatland—Dr. Dorr and Dr. Snodgrass are both in a labyrinth of confusion.

They have both been forced to admit that they don't know anything about where the impregnation takes place. I don't think they ever will know. It seems to me there is only one point in these cases, whether it is pus tube or whether it is tubal pregnancy, or whatever it may, it is extrauterine pregnancy, and the thing to do is to make your diagnosis, and make it early; and if we make our diagnosis early we should operate early. Like everything else, when we find that it is operable—that it is a case that ought to be operated—operate at once; don't let it go over. It is not a creditable showing, and certainly not satisfactory to have only 50 per cent of these cases to get well by themselves. We want them all to get well.

So far as I am able to judge from reading of papers and other literature on the advancement of surgery in the past ten years everything points to an early operation in ectopic gestation. Make your diagnosis—get at it—operate—save a life.

Dr. Guthrie—I think it is a question of having a well grounded belief that you have a case of ectopic pregnancy. Be assured that this condition exists. When the symptoms manifest themselves, then it is time to operate. Even the greatest and best surgeons of the world do not claim to be infallible in their diagnoses. As to going down, it is not a question of going down, but a question of knowing what you are going after and what to do after you find it. It is a question of discovering where the trouble is and being able to handle it when found.

Dr. Runyan—I said the first time I ever saw him operate: "I don't know what I am going to find, but I shall know what to do when I come to it." He found ectopic pregnancy and saved the woman's life. I candidly believe that woman would have died if let alone. If there is anything that would demand immediate operative interference it is a well-founded belief that the condition is ectopic pregnancy. In view of the assertion that 50 per cent of the cases take care of themselves without any diagnosis, I think we are warranted in the assumption that if reasonable diagnosis can be made and the operation done in time 95 per cent of them ought to get well.

Dr. Warren—Dr. Guthrie anticipated me a little bit. I coincide with him positively. From what he said I am led to believe from his experience as well as mine

that the diagnosis of ectopic pregnancy is not always an easy thing to do. I thought that I had a case in my own practice once. I watched it for a few days. There was not any fever. That dead fetus simply disappeared. I never operated; never advised operation; that woman got well. I have known operations for ectopic gestation where they thought they knew positively that was what they had. They cut down there and found nothing except a little hematoma, with no evidence of gestation at all. It was simply a mistake in diagnosis.

In the Medico-Chi Hospital, in Philadelphia, we witnessed an operation for ectopic pregnancy. It was so diagnosed by several physicians. We went in to see the operation. It was done; they found nothing—absolutely nothing. Two weeks later, at the Mount Sinai Hospital, in New York City, at the Academy of Sciences, they had open clinic; there were to be three operations for ectopic pregnancy. I went with a physician from this state. We wanted to witness them. The surgeon in charge gave a history of the case and presented the diagnostic features. He said: "There is no question about the diagnosis of this case." They cut that woman open and there was absolutely nothing there except a cystic ovary. He looked for the cyst, but found there was nothing there.

The next case he was equally sure of the condition. He had had the other members of the staff confirm his findings. He said: "I will stake my reputation on this diagnosis." They cut that woman open and there was nothing there. They did not operate on the third woman—ruled her out, and she was rolled away.

Dr. Watkins—Dr. Warren spoke of three cases operated on in which they found nothing. I had two cases of that condition. The patient gave a description of symptoms and submitted to examination. I diagnosed ectopic pregnancy, and knew that was it. I found no signs of any membrane whatever; no abscess or pus anywhere.

In reading the report of a case given in one of the journals recently I find that the fetal tissue completely destroyed the maternal tissue, and this maternal decidua and the ovum were completely lost somewhere in the peritoneal cavity. This only explains an experience I had recently. We cut down on a case and found a so-called hematoma; that the fetal tissue, having destroyed the mater-

nal decidua, the ovum itself was lost somewhere in some of the remote recesses of the abdomen.

Dr. Reagan (Louisiana)—I have had several of these cases of ectopic pregnancy, and I operated on them as soon as I made diagnosis. Last Monday I saw a case in which the rupture had occurred some two months before. Nature had tried to do the operation. The tumor was evacuating itself through the rectum. I opened up the fetal sac and found a most offensive, putrefying mass. I don't know what the result will be; hope it will be a recovery.

I do not wish to appear arbitrary, but I think diagnosis of ectopic pregnancy most emphatically calls for an operation as soon as diagnosis is made.

Dr. Dorr—As to the theory as to where impregnation starts, I could point to such authorities as Kelly, Noble and others as to the conjunction of the egg and the spermatozoa. In regard to Dr. Runyan's remarks, I never said anything about the cases which should be operated. I said there were cases which took care of themselves. Regarding Dr. Guthrie, I think he uttered the most dangerous statement I ever heard made. I think it will do more harm. I mean the statement that if he has a suspicion he must go down in the belly. A man must not go in there on suspicion. He must make a diagnosis. It is either a surgical case or it is a medical case. If it is a surgical case, that surgical diagnosis and operation may cover one-half of the pathology. Unless it is a surgical case he has no right to jump at a conclusion and go down in the abdomen on suspicion.

Dr. Guthrie—I would like to make myself clear. I do not wish to be misconstrued. I think nearly every man in this house understood me. I said when a man had a suspicion that there was a surgical condition that it ought to be looked after; that he should not hesitate to go down and see the case and learn with positive certainty what it is and what is required. There is none of us who can be sure about it. No man in this whole society would be any more apt to make a mistake in his diagnosis than Dr. Dorr. He is just as likely to be mistaken as any of us. I have seen the best surgeons in the state make mistakes in diagnosis.

Dr. Dunaway—This discussion seems to have taken a turn in which the participants have misunderstood each other. I am satisfied they are all right in what they mean to

say, but it is likely they happened to say something they didn't mean. So I believe that this part of it should be brought to a close. I would like to do it in this way. There is one point that I would like to have referred to by the gentlemen when they close the discussion—either one of them, or both. It is this: All of you who have seen these cases have observed in some an intense degree of shock and but a small amount of blood, while in others there was an immense amount of blood, relatively, with a relatively small degree of shock. That condition has puzzled me to some extent, and I would like to have it elucidated.

Dr. Cannon—I would like to ask Drs. Dorr, Runyan and Guthrie to state before this meeting if, in their practice, the number of deaths from cases of ectopic pregnancy operated upon have not exceeded those not operated upon. I would like to ask Dr. Dorr and Dr. Runyan how many cases they have had.

Dr. Dorr—Do you have reference to direct personal experience?

Dr. Cannon—Yes, sir.

Dr. Dorr—I have never operated upon any—have had 100 per cent of recoveries.

Dr. Runyan—I think the society has been very indulgent to us in the matter of time this afternoon. I will reply to the question in this way. The cases that did not seem severe enough to call for operation, in my opinion, were not diagnosed. They would not be anything like as severe as the ones that would require operation. They speak of cases and explain that 50 per cent of them got well without surgical interference. I take it for granted that the half of them got well because they were not diagnosed at all.

Dr. Cannon—Because they were not operated upon?

Dr. Runyan—Because they were not diagnosed. If they say each one of them was diagnosed, they don't mean it. I don't believe anyone in this audience would diagnose a case of ectopic gestation and not operate upon it.

Dr. Cannon—Please answer the question. Have your deaths from operation exceeded those which, from your observation, died without operation?

Dr. Runyan—I have never diagnosed a case of ectopic gestation without operating upon it. I have lost one.

Dr. Snodgrass—I never did have a case of ectopic gestation that I did not operate upon,

if I made diagnosis in time. I know of three deaths that occurred in ectopic pregnancy which were not operated upon, and diagnosis was not made until it was found in post-mortem. I think there is a misapprehension about my statement. What I wish to say is that 50 per cent of the ectopic gestations are never recognized at all. The ovule dies so early that it does not create any symptom whatever.

Dr. Cannon—I did not ask Dr. Snodgrass to answer the question, but I accept his explanation.

Dr. Laws—I do not know that I can add anything to the discussion. I think it has been pretty thoroughly threshed out. Of course, there are lots of theories and opinions advanced as to the cause of ectopic gestation that none of us understand—perhaps never will. The only thing for us to do is to pick out the one that seems most plausible to us and believe it, regardless as to whether or not the other fellow thinks it is true or does not approve it.

I believe that all cases of ectopic pregnancy should be operated upon as soon as they are diagnosed. I agree with Dr. Runyan in that respect. I have always made that a rule in my practice. I have only lost one case that I operated upon.

In regard to Dr. Dunaway's question as to the severe collapse and shock. The cases which I have seen have all been extreme ones—extreme hemorrhage. I believe that the patients that die from ectopic pregnancy are killed by the shock from the hemorrhage. The tremendous loss of blood is an important factor. They bleed, and bleed, and bleed. They keep on losing blood, and if they are operated upon they die. In some of those cases the hemorrhage keeps on flowing to such an alarming extent that it is impossible to stop it. Even if you ligate every point that you can find, they continue to ooze blood and go right on till your patient succumbs from shock.

THE RELIEF OF SUFFERING DURING LABOR.*

George W. Murphy, M. D., Strong.

It was with some degree of reluctance that I consented to read a paper before this society. I fully appreciate the honor which is

afforded me on this occasion, but when I realize that there are among our members men who for years have been educators in the front rank it makes me shrink from what I really believe to be my duty to the society and our profession, for fear that I shall not be able to do the subject justice. I know the criticisms which you may see proper to make will be in the right spirit, and will be calculated to instruct us all, and I hope to be greatly benefited by the remarks you may see proper to make.

My subject is on "The Relief of Suffering During Labor." We cannot violate any physical, moral, financial or other law without suffering the natural penalty for such violation. It makes no difference whether the violation proceeds from wilful intention or from ignorance, we must suffer just the same. This truth applies to woman in labor. I believe that the physician's first duty is the relief of suffering. Surgical and medical aid permit of recovery from numerous injuries and diseases which, if left alone, would end fatally. Still, in the vast majority of cases in which medical aid is called for, the doctor relieves the suffering and allows nature to perform the cure. It is pain which leads people to send for the doctor, rather than the knowledge that they are out of health, and it has been thus ever since our profession has existed.

Now, if the relief of pain is so important a part of our work, even in the presence of disease, surely it is our duty to lessen suffering which occurs without disease, like the suffering of natural labor. The vast majority of confinements occur without any real deviation from health, yet there are very few that get through without pain. I believe that the parturient woman does over one-half of the suffering in the world. Still, pain of this character receives less attention than any other kind. I do not advocate "meddlesome midwifery," for I believe that the more you know of this condition the less you will interfere with the labor; but the more you know of the pain which accompanies it, the more you will interfere with the pain.

I will not discuss why labor pains are painful—only the fact which you will concede, that they are very painful, and that the danger does not depend upon the amount of suffering. Many normal confinements are very painful, and, on the other hand, we sometimes see patients whose lives are in great danger who suffer very little. In most labors there is practically no risk, but a great deal of

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agony and suffering. We should always be kind and attentive to a woman in labor. I feel like we are not always as kind and considerate as we should be. A woman with a sprained ankle always receives plenty of attention, but the agonies of childbirth are often regarded in a somewhat cold-blooded way, as a harmless, necessary evil, which belong to the incurables and must be endured. There are many minor discomforts which are neglected in the lying-in room. The good physician will study these little matters and make a fine art of their treatment. I believe that success in obstetric practice depends more upon attention to these small things than to a knowledge of the great major operations. An ounce of prevention is said to be better than a pound of cure. So I would suggest preparing your patient for labor, and in this way save much suffering.

Among what class do we find labors most rapid and painless? Labor is easier among the savage than among the civilized. The reason is that the one is more natural than the other. In a confinement the whole system is taxed to its utmost. The nervous system, as well as the muscular and circulatory system, is taxed. The waste products are increased. We should encourage exercise. Walking is fine for this class of patients, provided it is fast enough to increase the respiration and the circulation. She should live in the open air and have plenty of sleep; baths which are neither very hot nor very cold. Constipation must be prevented and corsets discarded. Suspenders should take the place of garters. If her nipples are small or flattened, have her to draw them out by manipulation with the fingers, and their skin toughened by alcohol and alum. Ordinary ailments should be treated more by rest than by drugs than under usual circumstances.

I will not discuss actual disease, as this paper aims at nothing more than the relief of suffering in natural labor. We are often sent for to see women who, although in great pain near the end of pregnancy, are found, on careful examination, to be not yet in labor. The pains are more irregular and more continuous than true labor pains. They are generally in front and do not begin at the back and come around. They do not dilate the cervix. I am afraid it is more or less customary in such cases to go away, often prescribing an opiate and telling the patient's friends to send again when they are sure labor has begun. False

pains are generally caused from an overloaded rectum. It is surely worth the while to take the trouble to give the patient relief. Wash out the rectum two or three times with copious enemata. When the bowel is quite empty, put your patient in a warm water bath and keep her there ten minutes. This has a wonderful effect upon relieving false pains. Give her a good dose of opium, combined with the bromides if she is at all nervous. An abdominal application of mustard sometimes acts remarkably well. If these means turn false labor into true labor, so much the better. It will at least relieve the patient until true labor sets in. The stage of dilatation, although sometimes unconscious, often causes the patient more suffering than the expulsion stages. The first stage in normal labor is the longest. The patient does not always feel that she is getting along with her work sufficiently to reward her for this discomfort. A great deal can be done to relieve them. Wash the rectum out as before stated. Nothing, I believe, causes a woman of sensitive feelings more mental pain than the consciousness of knowing that every time she bears down she squeezes fecal matter out of the rectum. This is also a great discomfort to the physician to be compelled to stay in a fecal atmosphere, sometimes for hours. So attend to this small matter of washing out the rectum. The hot bath is also good for the early stage of labor. There are discomforts of various kinds which have to be reckoned with—the contractions of the uterus in summing up the suffering of labor. These discomforts are immensely relieved by immersion in hot water. Nausea and vomiting often cause a great deal of suffering. We are apt to explain that a "sick labor is a quick labor." Put a mustard plaster on her stomach and give her a dose or two of medicine. Why should a parturient woman have less attention for her painful symptoms than other patients would demand? In some cases great suffering is caused by almost continuous painful and irregular contractions of the uterus. The remedy for this is chloroform. First fully anesthetize your patient, then let it gradually wear down, and then a few whiffs occasionally and you soon have the situation in your hands. Exactly the same treatment is the best in another painful condition. When the uterus is acting properly, the muscles of the cervix do not contract when the muscles of the uterus are contracting. In other words, the upper part of the uterus is active and the lower part

passive. But sometimes both parts contract at once, and, instead of feeling the cervix opened out, the examining finger notes that the cervix closes up during a pain. This is known as "spasmodic rigidity" of the cervix. It is most easily cured by chloroform as above stated. Chloroform often acts on a rigid and slowly dilating os. It is better than any other drug. Its effects are immediate. When the membranes rupture and the water escapes at the beginning of the labor, the suffering of the first stage is increased, because it is prolonged. Patience is demanded in a case of this kind on the part of the doctor and the patient. Use your fingers, which are the best instrument in assisting dilatation.

But a very distressing condition to the patient and troublesome to the doctor is exhaustion coming on when little or no progress has been made in the dilatation of the cervix. These are the cases where judgment is needed. The point to decide is: Shall I stop labor by sedatives and give the patient a good rest, or shall I help matters forward actively and get labor over as quickly as possible? If you take any middle course between these alternatives the results are nearly always bad and very unsatisfactory, for the patient, depressed by the drugs and wearied by the prolonged labor, generally reaches the end in bad shape. If you choose the first course, opium is the drug. When your patient is anxious and restless, her nerves "upset," as well as her body exhausted, give her chloroform—just enough to abolish the reflexes—and then give a hypodermic of morphin and atropin. She will then sleep for some time, and when she awakes she will go on with the labor much better. Very often the cervix dilates under this treatment.

If you decide to go on with the labor, you will also have to decide this point: Shall I assist the uterus to do its work, or shall I take the matter in my own hands and dilate the cervix artificially? In helping the uterus dilate the cervix, use hot baths, friction over the abdomen. Quinin is being used more and more. Ergot is seldom now used by our best obstetricians. If you dilate artificially, use your fingers. The indications for this are exhaustion of the mother, threatened death of the fetus, or threatened rupture of the uterus.

In the second stage the great question is the relief of suffering. The use of chloroform is best in obstetrics. It is safe and very effective, and pleasant and convenient. I do not believe it tends to hemorrhage when properly used. It is exhaustion in most cases that

causes the hemorrhage. Labor is slightly delayed, but I think we are more than paid for this in the comfort it gives the patient. If it is good in normal labor it is absolutely necessary in operative midwifery. Doctors sometimes perform these operations—such as forceps extraction, turning, etc.—without it. I consider this extremely bad practice.

Now, let me consider two minor points. Cramps often cause suffering. Relieve this by hard rubbing down by nurse or assistant. For the pain in the back, have the nurse to press on the sacrum firmly. After the child is born do not be too energetic in conducting the third stage. The uterus must have time to separate the placenta, and premature squeezings are very painful. You should sit with your hand on the uterus and make gentle but firm pressure. After the placenta has completely separated, a very mild squeeze will expel it into the vagina, where it is easily removed. If we have to take the afterbirth, we should administer chloroform, unless there is so much hemorrhage that it has to be done at once. Women sometimes say that stitching the perineum hurts them more than the labor. This is opposed to the teachings of our text-books—that the parts are deadened and that there is scarcely any pain. In repairing any serious tear, chloroform should be given in order that the work may be done neatly, carefully and without pain. It is not an easy matter to give chloroform and repair the perineum at the same time, so I always get another doctor to assist me and share the responsibility, if the tear is serious. In an ordinary tear, involving only the perineal body, without injury to the sphincter ani or the rectal mucosa, there is another way. The pain is almost altogether caused by puncturing the skin or mucosa with the needle. Therefore, I unite the muscles and connective tissues without passing the needle through the skin or mucosa, and the operation is almost painless. It will not be necessary to use chloroform in this way, and very seldom necessary to use the catheter. Repair these tears with catgut, hardened in chromic acid, and they will last long enough for the tear to heal, and it will not be necessary to remove them. You thereby save your patient the pain and discomfort of exposure.

After-pains often cause much suffering, and are often regarded as necessary evils. If you would avoid these to a great extent, let the patient turn over on her hands and knees when passing her water. This will allow clots and discharge to run freely from the uterus

and vagina, and thus remove the cause of these pains in a great many cases. If this fails, we may administer a little opium, with nitre or potassium nitrate and hyoseyamus and belladonna. If this fails, examine the uterus with your finger and clean out the clots.

Another minor detail: Many women hate castor oil and others hate epsom salts, yet the doctor and nurse insist one of these should be given about the second or third day in order to open the bowels. Why not give five or six grains of calomel? It works to perfection.

We have considered some of the sufferings of ordinary labor and measures for their relief. There are many others which will occur to the doctor. The object of this paper is not to instruct anyone, but simply to suggest thought. Labors in which we have to save life are rare. Let us devote our attention to relieving suffering in the ordinary ones.

REPORT OF A MEDICO-LEGAL CASE.*

H. C. Dunavant, M. D., Osceola.

I have brought this case up as being rather unusual in practice, and because I wish to emphasize some points in the social life among the negroes, and some points in regard to a more thorough and careful diagnosis by medical practitioners.

CASE OF WILLIE JEFFRIES.

Willie Jeffries is a negro woman, and is the wife of H. J. Jeffries, of Luxora, Arkansas. They clean and press clothing for a living. Before they moved to Luxora they lived in a little house adjoining the Baptist parsonage (white), in Osceola, Arkansas. Before they moved from Osceola Jeffries and his wife would take drives, and at different intervals Willie Jeffries called Mrs. Curls, a Baptist preacher's wife, to administer to her that she might be able to keep from miscarrying. The preacher and wife thought she was pregnant, and so declared at the time, and do now. When Jeffries and wife moved to Luxora they told their neighbors that she was pregnant, and advised them about having clothes made for the child, and just what to make. It was in testimony that the clothes were made. Before the time came which caused her arrest, Willie Jeffries passed out

the front gate, and an old negro woman, whom she had told about being pregnant, noticed Willie, and about the time she looked at her the wind blew her apron and she noticed that she was very much reduced in size, and remarked to her, "Child, what is the matter with you? You do not look like yourself. What has happened?" Her reply was, "Nothing." In a few days a show came to Osceola and was billed to show in the evening. H. J. Jeffries told his wife that he was going to the show, and did so, returning to Luxora about 11:00 o'clock at night, and when he returned he found Willie Jeffries in bed, with the bed clothing all bloody, and he at once asked what had been the trouble, and she told him that she had given birth to a child. He asked where it was, and she told him that a woman had carried it off. He called in a neighbor and he went to look for the child, and after considerable searching returned and said he could not find the child, and asked if she did not need a physician to give her attention. She told him that she did not need one, but he called one the next morning, and Dr. Lowery examined her and reported that she was in good shape, and found quite a bundle of bloody clothing and rags, and a board which had been used for pressing was bloody. Dr. McCrite was called in later, and he made an examination, and some excitement resulted as to where the child was. She finally confessed to Jeffries that she had no one to attend her while in labor, and that she knew nothing about it, and when the child came she found that it was attached to her by a cord, and she got the razor and cut the cord which bound her to the child, and when she cut the cord the child bled to death, and she did not know what the white folks would say, so she wrapped it in a cloth and laid it in the Mississippi River (as she lived on the bank of the river).

After this report came to light she was arrested for murder and for disposing of a dead body without making it publicly known, and was bound over to await the action of the grand jury without bail. When she was placed in the jail at Osceola it became necessary to have a physician call on her. Dr. Prewitt was called and saw her some four or five times, and publicly stated that he did not believe that the woman had given birth to a child, and stated that there had been no signs of milk in the breast, and that she had always been clean, from the first time he saw her, which was only about one week after the al-

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leged birth. In the meantime, H. J. Jeffries, her husband, employed me as her attorney, and I immediately called at the jail and had a consultation with her, in which she stated that she had never given birth to a child. I told her that if she had not given birth to a child I would have her examined, and an examination would divulge that fact. She said, "I am willing to be examined." I called Dr. Prewitt and Dr. Dunavant to make the examination, and they told me that she had never given birth to a child. With that assurance, I was willing to go to trial. I immediately proceeded to release her by a writ of habeas corpus, and the cause was heard before L. D. Rozzell, county and probate judge for Mississippi County. At the hearing the state was represented by A. F. Barham, who brought all the testimony available before the court, and Dr. McCrite and Dr. Lowery were witnesses, and they testified that they could not say positively that she had given birth to a child, but that they were satisfied in their own minds that she had given birth, and that every indication showed that she had. After the testimony was heard, the court released her on bond of \$250.00, and when the circuit court convened she was not indicted on any of the charges, because of the fact that an examination was made which conclusively showed that she had never given birth to a child.

S. F. GLADDISH, *Attorney.*

These two negroes were above the ordinary negro. This woman had been a school teacher, employed in the county, employed by the school board at \$50.00 per month, while Jeffries wore good clothes and drove around with a good horse and buggy. Jeffries admitted to me that he had been abusing and threatening to leave his wife unless she could, or did, bring him a child, as he was extremely anxious for an heir. Now, Mr. President, this is a case where a woman ignorantly thought she could hold her husband by padding herself and pretending to have a baby. I have evidence that she was padded, and people actually thought she was pregnant. Jeffries really thought he was a father. The two doctors at Luxora actually believed she had given birth to a child, and she admitted she had and had thrown it in the Mississippi River. There was the bloody clothing and her admission that she had given birth and destroyed the child. Two physicians were called, and with-

out making any but an objective examination decided her statement was true, as most any other physicians would have done. As a natural result, she was brought to Osceola and committed to jail. Dr. R. C. Prewitt was called to see her in jail. He found her free of lochial discharge, and no lacteal fluid or enlargement of the breast. Dr. Prewitt reported these facts to the attorney, Gladdish. Gladdish then came to me and asked my opinion, saying the woman was willing for a physical examination if I thought it possible to establish the fact positively whether she had or had not given birth to a child. I told him that we could say positively at that time—seven days after she claimed to have been confined—whether or not she had given birth. She was brought to my office, and Dr. Prewitt and myself made a thorough examination. There was no enlargement of breast; no lacteal fluid; no striæ gravidarum. An ordinary sound would not enter the osuteri without holding it with a vulsella, and then would enter only two and one-fourth inches. The osuteri was perfectly normal. No sign of any trauma. No discoloration of mucous lining of vaginal walls. With all of these facts, Dr. Prewitt and myself unhesitatingly said she had never given birth to a child.

Jeffries has admitted to me that he has often had gonorrheal orchitis, and I am convinced that he is sterile. Now, Mr. President, this ignorant coon had annoyed this woman about a child until she, in order to appease his wrath, incriminated herself to the extent of facing a penitentiary sentence without a physical examination as made by Dr. Prewitt and myself. It is true an ultrascientific brain-storm theorist might come along and say a gyrus was kinked or wanting, but would it not be better to say that it was an ignorant demand by this husband upon an ignorant, but faithful, wife? I believe in environment. This woman believed she could, by this lying deception, retain her man, and that was her ruling thought. Besides, the American negroes have not, as yet, gotten far enough away from the African chief whom I have somewhere read about, who killed his wife's lover, and she, believing in immortality, committed suicide in order to join her lover. But this chief was equal to the emergency, and he in turn killed himself in order to follow the pair and break up their *teté-a-tetés* in the other world.

Without a careful, thorough physical ex-

amination this woman would have been sent to the penitentiary, a care upon an already overburdened state.

Now, Mr. President, pardon me for digression, but I want to affirm that our duty is to at all times help to unmask frauds; and right here I want to say that the state, through her charitable institutions, is guilty of a mammoth fraud upon the producers of the state. No state should take from the producers and distribute alms unless she gives wisely. In charity, sentiment alone is not to be trusted. Intellect alone can transform benevolence into beneficence. Think for one minute what a criminal political blunder our state governments are committing in the government of our state charitable and penal institutions. These institutions may work mechanically, and to all outward appearances may seem grand, but do they answer the problems of dependency? Are they curative? It is an undisputed fact that the inhabitants of our state charitable and penal institutions are increasing at a greater per cent than the people who have to support them. Is it not time we were individualizing and getting into personal relationship with our dependents? The physiologic inaction of the occupants of our asylums, poorhouses and penal institutions is a prolific breeder of disease, and not a cure. I can imagine that our descendants one hundred years hence will wonder at our shortsightedness and heathenish cruelty when they read of our present management of our dependents. Has the dance two or three times a week had any beneficial effect in our asylums? Does anyone know of an asylum superintendent who has contributed one single intelligent idea toward the solution of this vexed question? Is it not a fact that our governors generally select some ordinary doctor, with a political pull, instead of an alienist for the superintendent of our insane asylums?

Mr. President, it is an amazing and incomprehensible fact that honorable scientific medicine receives the treatment it does from the hands of our politicians. Think what medical science is saving to state and nation every year, and then turn and behold with what scornful contempt we are treated by our politicians in Congress and state legislatures! Legislators can generally be interested in anything when it comes to dollars and cents, and we will have to continue pounding them with the fact that preventive medicine pays. England has reduced her death rate exactly in proportion to the thoroughness of vaccination,

sanitation, drainage, pure food and water supply, etc. If Christ, who, according to the Bible, healed the sick and brought the dead to life, should come among us today, he would be an exhorter and helper in the work of preventive medicine. To prevent a death is near akin to bringing the dead to life; to prevent sickness is much greater than to cure sickness.

Science is not antagonistic to religion. It gives it eyes and hands with which to utilize its desires. We have been curing sickness; we must now prevent sickness. We need a department of public health with a cabinet officer at Washington. Politics has reached such a stage of depredation that it seems to require a definite sum of blood money to secure needed legislation. We must call a halt and take a retrospective view of the past. Let us behold the tapestry of our civilization as disease and politics weaves its miscolored and rotten fiber that mars its beauty, spoils its design and weakens its strength.

Mr. President, I believe it would be the best financial investment the state could make to employ real scientific medical men, even if she had to educate them at the expense of the state, and place all of the state charitable asylums and penitentiary under their control. Whether we live to see this or not, that day is coming just as sure as the sunlight surges up from the horizon's edge. A great physician once said, "If my son goes into the medical profession I shall cut him off with a shilling." Why so? "Because the profession is not appreciated by the public." I am glad that I am an optimist. I believe the day is coming when the medical profession will be recognized and appreciated.

We should reorganize the treatment of our criminals and lunatics upon the principle of protection to the community and reformation of the law- and mind-breaker, applying prophylactic protection, reformation and economy. Stop trying to prove by some lachrymose doctor that most of our criminals are lunatics, who, after serving a short time in enforced idleness, are again turned loose by some incompetent asylum superintendent, or a political governor, to again commit a crime and again have some pseudo-scientist repeat the same farce. No ingenuity of man could ever conceive of a better plan of exaggerating and increasing mind derangement than by confining in the same building hundreds and thousands of mental or suspected mental defects. Take one of our greatest authorities;

he says this is true, and says what every case demands as the primary condition of recovery is separate and individual treatment and consideration.

In olden times the pianoforte tuners used to have an octave in which all the dissonances and discords of the whole keyboard were gathered, that they did not know how to distribute and harmonize. They called this octave the "devil." I think our sociological tuner has failed to confine this "devil" so long that he is pretty well distributed throughout the whole seven octaves of society, and if there is not a change it will result in our whole social structure being brought to a literal *reductio ad absurdum—sur ad lunaticum*.

DELIRIUM TREMENS—A NEW PLAN OF TREATMENT.

Geo. E. Pettey, M. D., Memphis, Tenn.

(Abstract of paper read before the Southern Medical Association, New Orleans, November 10, 1909.)

This condition is defined as a functional disturbance coming on during the course of chronic alcoholism, and is due to accumulation of toxic poison in the blood. These poisons are of both drug and auto-origin. The potency of these poisons is progressively increased by a loss of the fluid element of the blood by excessive perspiration and by deficient absorption of water from the stomach. In fully developed cases the volume of circulating medium is pathologically decreased. The brain is hyperemic in a large majority of cases, and enemic in a small per cent. These conditions of the brain are an essential factor in the immediate causation of the delirium. In order to intelligently apply remedies to the control of delirium it is necessary to differentiate the hyperemic from the enemic cases. The indications in treatment are: Support of vital functions, control or arrest of delirium and removal of poison from the blood. For the purpose of restoring the volume of blood, supporting action of heart and promoting elimination by kidneys, normal salt solution is given by rectum, by hypodermoclysis, and, in severe cases, intravenously. This is pushed until the entire arterial and venous systems are filled with fluids to their

utmost capacity, then this fluid is drained off by the bowel with large and repeated doses of epsom salts, the idea being to practically wash the poison out of the blood by forcing fluids into the system and draining the same off by the bowel and kidneys. Calomel is given in full doses at the beginning of the treatment. Spartein in doses of two grains is given every two to six hours for the purpose of giving additional support to the heart and promoting action of kidneys. This remedy is classed as our most reliable heart tonic and an efficient nonirritating diuretic.

The free introduction of normal salt solution gives most reliable support to the heart, dilutes and renders less toxic the poison in the blood, improves the condition of the patient in every respect, and does much to allay the delirium, but for the special purpose of combating the delirium, in the hyperemic cases, gelseminine is given in doses of one-twenty-fifth grain every one to two hours until its full physiological effect is developed, unless the delirium and unrest is sooner allayed. This drug is a reliable cerebral sedative and motor depressant, and is not incompatible with drug indicated in the hyperemic type of cases, but should not be given in the anemic cases. Strychnia, a drug the effects of which are directly opposite to those of gelseminine, is given for the control of the delirium in the anemic cases. Strychnia is positively contradicted in the hyperemic cases, but in the enemic cases, by increasing the blood supply to the brain, it quiets delirium. Alcohol is reduced to a moderate quantity, but not entirely withdrawn, during the delirium. Physical restraint is condemned. Opiates and other narcotics and sleep-producing drugs are condemned. They are not only dangerous *per se*, but interfere fatally with the action of curative remedies.

This plan of treatment has been employed, when indicated, in 450 consecutive cases of chronic alcoholism. Some of these were delirious when admitted; others developed delirium after admission, but in no case did the delirium resist the treatment longer than twenty-four hours, and in most cases this symptom was overcome in from six to twelve hours from the beginning of treatment. No death from delirium tremens occurred in the entire series of 450 cases.

THE JOURNAL

OF THE

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Edited by
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Councilor Eighth District

307-8 Southern Trust Building, Little Rock, Ark., to whom all communications should be addressed.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust Building.

Editorials.

RESOLUTIONS TO AMEND THE BY-LAWS.

The following resolutions introduced by the Council were read in the House of Delegates, and under the law will lay over until the next annual meeting, at which time they will come up for consideration:

Amendment No. 1:

Whereas, It is well to carefully guard the interests of this society; therefore, be it

Resolved, That the words, "the secretary shall give bond in the sum of \$1,000.00," be added in the beginning of section 4 of chapter 6 of the by-laws; and, further, be it

Resolved, That section 7 be added to chapter 7, as follows:

"Sec. 7. The Council shall have authority to accept or reject all bonds."

Amendment No. 2:

Whereas, Injustice may be done some county societies by the failure of their delegate or alternate to attend the state meeting, therefore, be it

Resolved, That the following addition be made to chapter 7:

"Sec. 6. In case of a vacancy in the office of delegate, the council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office."

Amendment No. 3:

Dr. Young introduced the following as recommended by the council:

Whereas, It seems that the cause of medical organization can be forwarded thereby, therefore, be it

Resolved, That the words, "who is a graduate of a reputable medical college," be struck from section 5 of chapter 9 of the by-laws.

It seems to us that the most important of the above amendments to the state constitution and by-laws is No. 3, which would allow the undergraduates, who are now licensed physicians, to become members of our State Medical Society.

This amendment has been before the society on previous occasions, and has always failed in getting sufficient support to get it through, but our state law now requires the applicant to be a graduate before taking the State Board examination. So that in the future the undergraduate class will not grow, but, on the other hand, will gradually diminish. Now, don't you think the time is ripe to take him into the society? It will help him and it will help organized medicine.

JONNESCO'S CONTRIBUTION TO SPINAL ANESTHESIA.

In 1885 J. Leonard Corning, of New York, demonstrated that complete anesthesia of the lower portion of the body could be produced by the injection of cocaine solution into the spinal canal. The procedure remained little more than a physiological experiment until 1899, when Bier reintroduced it as a surgical measure. But after careful observations, Bier himself asserted that the spinal route would not be acceptable for the production of anesthesia until there was found some substitute for cocaine that is free from its disagreeable by-effects.

With the discovery of stovaine by Fourveau, about five years later, and the introduction of eucaine, novocaine and tropococaine, interest in spinal anesthesia revived. With these newer anesthetics, sometimes combined with adrenalin, spinal anesthesia became a frequently practiced procedure, especially abroad, and, to date, its statistics cover many thousand cases, most of them injections in the lumbar region. These statistics showed that the introduction of anesthetics into the spinal canal, as it has been practiced, was by no means free from danger. Its record of mortality by respiratory paralysis and otherwise is one in 650 cases (much greater than that of chloroform); and there have been reports of permanent paralysis, of the sphincters and of the lower extremities, and gangrene of the feet, following its employment.

At the surgical congress held in Brussels in September, 1908, Prof. Thomas Jonnesco, of Bucharest, reported that he had adopted a mode of spinal injection which was not only free from danger, but could also be used to secure analgesia of any part of the body. For the first purpose, viz., to obviate depression of the higher nerve centers, he added neutral strychnin sulphate to the anesthetic solution (he prefers stovaine). For the second purpose he made his injection at a level of the spinal column appropriate to the region to be operated upon. His report at Brussels related to 603 operations under lumbar analgesia by stovaine without strychnin, and fourteen medio-cervical or superior dorsal injections of stovaine and strychnin (for operations on the head, neck, thorax, upper extremities).

In a later report (British Medical Journal, November 13, 1909; Deutsche Medizinische Wochenschrift, December 9, 1909), covering a second series of 398 operations under rachistovainization, Jonnesco announced that he had discontinued the medio-cervical injection as unnecessary and dangerous [sic]. "It favors the appearance of bulbar pneumonia—nausea, vomiting, pallor of the face, faintness, momentary stoppage of respiration, and so on, phenomena due to a too direct action of the anesthetic fluid on the bulb." Medio-dorsal puncture he has also abandoned as difficult and unnecessary. He now employs but two sites of injection, viz., between the last dorsal and first lumbar vertebrae for operations on the abdomen, perineum and lower extremities, and between the first and second

dorsal vertebrae for operations on the head, neck, thorax and upper extremities.

Jonnesco's second series of 398 operations includes 103 by this high dorsal analgesia, of which fourteen were operations on the skull and forty-five operations on the face. "If with the higher dorsal injection it is desired to obtain analgesia [sic] of the head and neck the patient is made to lie on his back" immediately after injection. "If after four or five minutes the analgesia [sic] of the head or of the neck is not complete, the patient's head should be lowered below the level of the body for three or four minutes." That anesthesia, or, to use the term to which Jonnesco so cautiously adheres, analgesia of cranial nerves can be secured by upper dorsal rachistovainization contradicts, we believe, the results of the experiments of Hill and others, in which fluids injected into the spinal canal did not reach beyond the foramen magnum. Corresponding to the phenomena of lumbar spinal injections upper dorsal rachistovainization, Jonnesco relates, is usually promptly followed by paresis of the muscles of the head, neck and limbs. By what mechanism, under these circumstances, respiration continues, Jonnesco's last article vouchsafed no explanation.

Jonnesco's reported statistics are: 603 lumbar analgesias with stovaine alone; 412 rachistovainizations by his new method, and 211 spinal analgesias by two pupils, Jiano and Nasta, employing his technics—all without death or serious complication. On the basis of this experience Jonnesco confidently asserts that, by the addition of neutral strychnin sulphate to the anesthetic solution, "superior spinal analgesia can be performed without danger," that "there are no contraindications for general spinal anesthesia, * * * it may be employed with any patient," and that "general spinal anesthesia is absolutely safe;" and he is "firmly convinced that general spinal analgesia will be the analgesic method of the future."

Jonnesco's earlier method, including the medio-cervical injection, was denounced by Bier and Rehn. His revised method, as recently demonstrated by him, failed in London and has failed thus far in America to arouse an enthusiasm akin to his own. At a recent demonstration in New York the Roumanian surgeon injected four patients. Two cases were of dorso-lumbar injection, and in both the result was quite satisfactory. In

the other two—both slender and apparently favorable subjects—Jonnesco essayed his high dorsal injection. In the first of these he had to insert his needle twice and manipulate it considerably (with the escape of blood) before he withdrew cerebro-spinal fluid and inserted the solution. At the visitor's signal the operation was begun. Although it involved only superficial tissues on the chest, the patient complained repeatedly of pain and cried out for chloroform.

Jonnesco (who, it must be said, does not understand English) explained these complaints as due to nervousness and to the sensations of contact and traction—although both during and after the operation the patient felt pin pricks on his arms, and noticed numbness only on one shoulder. In the other case, Jonnesco made repeated punctures with the needle, each time withdrawing blood, and thrust the instrument in and out to such uncertain depths that it appeared to bystanders that the cord must have been more than once punctured, if not actually transfixed. Finally, unable to locate the subarachnoid space by the escape of cerebro-spinal fluid, he abandoned the attempt and the patient was etherized. It would be manifestly unfair to condemn the upper spinal injection on the basis of two such failures. But they are enough to warrant the conclusion that this procedure is difficult and uncertain, and Jonnesco's statistics of 117 cases of his own, 39 of his assistants, are not large enough to show that it is not also dangerous.

Concerning the value of Jonnesco's contributions to spinal anesthesia, we must preserve an open mind and await the experience with his methods of other surgeons in other lands. The peoples of different countries are not alike in their susceptibility to and their capacity to endure pain, and evidently observers differ in their interpretation of the expressions of physical distress. Nor are 1,000 cases of spinal analgesia enough to form a basis of comparison, as to mortality, with chloroform or ether. Until we have had the verdict of others on the efficacy and safety of the high spinal injection, and a much larger total of strychnin-anesthetic injections, the profession cannot be expected to abandon the view that spinal anesthesia is a valuable resort for cases in which anesthesia by inhalation is contraindicated and local anesthesia is inadequate, but that the wisdom

of adopting it as a routine substitute for narcosis has not been established.—American Journal of Surgery, January, 1910.

News Items.

A special conference on Medical Education and Legislation will be held at the Congress Hotel (formerly the Auditorium Annex), Chicago, Monday, Tuesday and Wednesday, February 28, March 1 and 2, 1910, the session to begin at 10:00 o'clock Monday morning.

Personals.

Dr. J. P. Runyan spent a few days in Philadelphia this month on professional business.

Dr. T. R. White has changed his location from Smithville to Truxton, Ariz.

Dr. B. D. Luck, of Pine Bluff, spent the day in this city on the 10th inst.

Dr. B. H. Hill, of Stuttgart, was in the city for a day during the early part of the month.

Drs. W. F. Smith, of Clarksville, and H. L. Throgmorton, of Pocahontas, were in the city on the 7th, attending the meeting of the Republican State Committee.

Dr. W. H. Woodyard, of Judsonia, was elected a director of the Mississippi Valley Life Insurance Company at the recent meeting of the stockholders, held in this city.

Dr. H. H. Spillers has recently moved from London to Russellville, and will again be a candidate for representative from Pope County, and it is the wish of the Journal that he be reelected, for Dr. Spillers did a great work in the last legislature.

Dr. J. C. Hays has changed his location from Scottsville to Russellville.

Dr. R. C. Dorr, of Batesville, was in the city December 29, attending a meeting of the Ancient Arabic Order of Mystic Shriners.

Dr. E. H. Martin, Hot Springs, attended the hookworm conference held in Atlanta, Ga., January 18 and 19, as the delegate from this state, appointed by the governor.

Dr. Lex Wadley has returned from New Orleans, where he has spent the past year in the eye, ear, nose and throat infirmary. He has not as yet decided where he will locate for the practice of his specialty.

County Societies.

FAULKNER COUNTY.—The Faulkner County Medical Society met in Conway at 10:00 o'clock a. m., December 16, 1909, with the following members present: Drs. G. L. Henderson, president; I. N. McCollum, secretary-treasurer; G. D. Dickerson, J. S. Westerfield, J. F. Brown, J. H. Downs, J. E. McMahan, J. W. DeJarnett, J. B. Munn, George S. Brown, Thomas Mabry. Visitors: J. M. Muse and H. C. Cureton of Conway and W. C. Dunaway of Little Rock. The regular order of business was disposed of. The society went into the election of officers, resulting in the election of Dr. J. W. DeJarnett, Guy, president; Dr. J. H. Downs, Vilonia, vice president; Dr. J. S. Westerfield, Conway, secretary-treasurer. Dr. G. L. Henderson was elected delegate to the Arkansas Medical Society and Dr. J. F. Brown alternate. At 1:00 p. m. the society and visiting guests repaired to the Hotel De Hines, where dinner was served. The society reconvened at 2:00 o'clock, when the following program was carried out, both the papers and discussions being of much interest. The society was greatly disappointed that our councillor, Dr. Meriwether, could not attend, as had been expected. Scientific program: "The Early Bedside Diagnosis of Typhoid Fever," Dr. Geo. S. Brown, Conway; "Immunity," Dr. T. C. Watson, Mount Vernon; "Report of Obscure Case of Stomach Disease," Dr. J. F. Brown, Conway; Paper (title to be supplied), Dr. C. P. Meriwether, Little Rock; Clinical Case, Dr. J. W. DeJarnett, Guy; Report of a Case, Dr. J. S. Westerfield, Conway.

WASHINGTON COUNTY.—The Washington County Medical Society held its annual meeting at Fayetteville, January 4, 1910. The following officers were unanimously elected: President, Dr. C. F. Perkins, Springdale; vice president, Dr. J. W. Fergus, Elm Springs; secretary, Dr. Nina V. Hardin, Fayetteville; treasurer, Dr. H. D. Wood, Fayetteville; delegate, Dr. T. W. Blackburn, Cane Hill; alternate, Dr. C. F. Perkins, Springdale. Dr. W. N. Yates brought before the society a question of vital importance to every county society—that of a permanent home for the society and its property. This met with a hearty response from those present, and President Blackburn asked Dr. Yates to name the members of a committee of three

to investigate and determine the feasibility of building a room of the society's own, and Dr. Yates appointed on this committee Drs. W. B. Welch, E. F. Ellis and Otey Miller. After the election of officers, the reading and discussion of papers was taken up. A most excellent and edifying paper on "Medical Ethics," by Dr. A. S. Gregg, was read by Dr. Yates, Dr. Gregg being absent. The members present concurred in the opinion expressed by Dr. Gregg that no amount of coercion and no number of copies of Principles of Medical Ethics suffice to make of an unethical fellow an ethical man; that the principles of medical ethics of the A. M. A. is "profitable for doctrine, for reproof, for correction, for instruction," but that an ethical gentleman will be an ethical medical man, and that if all medical practitioners were gentlemen in the fullest sense of the word, no book on the principles of medical ethics would be needed, but that a small card, suitable for the vest pocket, bearing the simple inscription, "Whatsoever ye would that men should do to you, do ye even so to them," would suffice. The subject of "Pneumonia" was next discussed. At the conclusion of this, the society adjourned to meet at Fayetteville on the first Tuesday in April (April 4), 1910, at 1:30 p. m.

NINA V. HARDIN, *Secretary.*

SEBASTIAN COUNTY.—The Sebastian County Medical Society met in regular monthly session in the parlors of the Hotel Main at 7:30 p. m. Dr. Bert L. Ware, of Jenny Lind, was elected to membership in the society. The following officers were elected for the year 1910: Dr. D. R. Dorente, president; Dr. H. Buckley, vice president; Dr. Clark Wood, secretary; Dr. C. W. Garrison, treasurer; Dr. J. D. Southard, member Board of Censors. Dr. W. W. Bailey read a very interesting paper, in which he outlined the early history of organized medicine in Sebastian County, touching upon points of scientific interest up to the present time. After the session the society was entertained with a banquet given by Dr. Bailey as a farewell love-feast. Dr. Bailey will leave shortly for a trip around the world.

D. R. DORENTE, *Secretary.*

MISSISSIPPI COUNTY.—The Mississippi County Medical Society met at the Business Men's Club in Blytheville, December 14, 1909. The business meeting was held at 11:00 o'clock and the scientific session in the afternoon.

Those present were: E. E. Craig, Pecan Point; R. P. Nall, Armorer; Robert H. Sanders, Manilla; Charles F. Webb, Burdette; J. S. McCreight and Thomas F. Hudson, Luxora; C. C. Stevens, John F. Sanders, W. H. Borum and G. W. Parker, Blytheville; T. G. Brewer, C. M. Harwell and O. Howton, Osceola. Visiting physicians were: T. J. Trautman and A. G. Crider, of Hayti, Mo., and A. R. Conrad and wife, of Caruthersville, Mo. W. J. J. Paris, recently located at Blytheville, and Charles F. Webb, of Burdette, were elected to associate membership until the next regular election.

The symposium on tuberculosis was well presented, there being ten papers, and all the essayists were present except one. Many of the laity were present, including lawyers, ministers and business men, who seemed to be interested in the several papers read. The society adjourned to meet at Osceola Tuesday, January 11, 1910. Fraternally,

O. HOWTON, *Secretary*.

MISSISSIPPI COUNTY.—A meeting of the Mississippi County Medical Society was held at the court house in Osceola, Tuesday, January 11, 1910, at 1:00 p. m. The following program was rendered: "Malarial Insanity," with report of case, C. M. Harwell, M. D., Osceola; "Anesthesia, with Chloroform and Ether," E. E. Craig, M. D., Pecan Point; Paper, S. A. Lowry, M. D., Luxora: "The Alleviation of Certain Conditions by Treatment Directed to an Obstinate Constipation," Thomas G. Brewer, M. D., Osceola.

O. HOWTON, *Secretary*.

BOONE COUNTY.—At the meeting of the Boone County Medical Society at Harrison Wednesday, January 5, the following officers were elected: A. M. Hatchcock, president; J. H. Fowler, vice president; H. L. Routh, treasurer; F. B. Kirby, secretary.

GREENE COUNTY.—The Greene County Medical Association, at its regular monthly meeting, January 11, elected the following officers: Dr. Paul Dickson, president; Dr. G. T. Hopkins, first vice president; Dr. Jones Lamb, second vice president; Dr. Olive Wilson, secretary and treasurer; Drs. Haley, Scott and McKenzie, censors.

Early in December the following physicians met in the office of Drs. Haley and Owens and organized a postgraduate course of study: H. N. Dickson, P. L. Dickson, G. T. Hopkins, R. J. Haley, J. G. McKenzie, F. M. Scott, W.

R. Owens, Olive Wilson. These meetings are held every Monday evening from 8:00 to 10:00 o'clock in the class room at the sanitarium. Dr. George Bridges, of Mitchell Point, was elected to membership in the society at the last meeting. We sent to Dr. Blackburn, Bowling Green, Ky., for twenty copies of the course of postgraduate study as outlined by the Warren County Medical Society, and are following it. Our meetings are well attended, and we are really enthusiastic over the work.

OLIVE WILSON, *Secretary*.

YELL COUNTY.—The Yell County Medical Society met at Dardanelle, December 14, 1909. Present, J. R. Linzy, president; S. E. Miller, vice president; A. H. McKenzie, secretary and treasurer; Norlom H. Jackson, Sr., Pontoon; L. E. Love, Dardanelle; C. B. Linzy, Plainview; W. A. Worsham, Centerville.

W. A. Worsham, of Centerville, read a paper on "The Actions of Atropine," which was freely discussed by the society and highly appreciated by the members. A. H. McKenzie read a paper on "Medical Laws of the State and Duties of County Medical Societies," which was freely discussed by the society.

Officers elected: S. E. Miller, president; C. B. Linzy, vice president; A. H. McKenzie, secretary and treasurer. A. D. Gillum, of Rover, was proposed and elected a member of the society. All the dentists of the county were invited to meet with us and read papers. Papers next meeting: L. E. Love, "Lithimia;" C. C. Sims, D. D. S., "Oral Hygiene." Next meeting, second Tuesday in February, 1910, at Dardanelle, at which time the society will have a banquet.

A. H. MCKENZIE, *Secretary*.

JEFFERSON COUNTY.—The Jefferson County Medical Society met at the office of Dr. Hankinson, January 4, 1910. Meeting called to order by the president. Members present: Drs. Caruther, Hankinson, Woodul, Johns, Rowel, Brunson, Scales, Stewart, Jordan, Troupe, Williams, Smith, Jenkins, Breathwitt, Clark and Crutcher. The secretary being absent, minutes of last meeting were not read. The banquet committee asked for and were granted further time. The Committee of Fees reported and asked for further time, which was granted. The Board of Censors were not ready to make a report. A motion was made and carried that the Jefferson County Med-

ical Society send \$15.00 to the Jefferson Davis monument fund. A motion was made and carried that this society request the president of the state society to appoint two members who are pharmacists to attend the revision of the U. S. Pharmacopeia.

This being the time for the annual election of officers, election was held, which resulted as follows: President, J. S. Jenkins; vice president, M. C. John; secretary and treasurer, W. T. Lowe.

A motion was made by Dr. Caruthers that the members of this society be put on the program alphabetically, two each meeting, and that they be fined \$1.00 for non-performance of duty. Motion made and carried that Dr. Breathwitt act as toastmaster at the next meeting, at which the sole topic of discussion will be a reading and discussion of the "Principles of Medical Ethics."

Dr. J. S. Jenkins read a paper on "The Amount of Good Derived From Our Society During the Last Year." Dr. Luck read a paper on "Whooping Cough." These papers were freely discussed by several members present. The society adjourned till next regular meeting.

W. T. LOWE, *Secretary.*

WHITE-CLEBURNE COUNTY.—The White-Cleburne County Medical Society met January 6, 1910, at Searcy. Present, J. M. Jelks, president; S. T. Tapscott, Jr., secretary and treasurer; W. G. Holland, vice president, with the following program: "Puerperal Sepsis," J. W. Hassell; paper, J. J. Monerief; paper, W. H. Abington; report of three cases of membranous croup, L. E. Moore; paper, W. J. Hornbarger; paper, J. C. Cleveland; report of case, N. E. Fraser.

PHILLIPS COUNTY.—At the December meeting of the Phillips County Medical Society the annual election of officers was held, with the following result: H. H. Rightor, Helena, president; E. T. Brown, Barton, vice president; G. G. Altman, Helena, secretary-treasurer; A. A. Hornor, Helena, censor; M. Fisk, Helena, delegate to the Arkansas Medical Society.

The following resolutions were adopted by the society:

H. H. RIGHTOR, *Secretary.*

To the President and Members of the Phillips County Medical Society:

Gentlemen—Your Memorial Committee, to whom was referred the matter of giving proper expression to the feelings of the Phillips County Med-

ical Society on the death of our lately deceased and highly esteemed member, Dr. J. L. Pearson, would most respectfully report as follows:

Dr. Micajah L. Pearson died at his home in Poplar Grove, Ark., Monday evening, December 13, 1909, after an illness of several weeks' duration, surrounded by his immediate family, in the sixty-second year of his age.

His funeral occurred on the following day, the services being conducted by the Presbyterian minister, Rev. Johnson, the deceased being a lifelong member of that denomination. The large attendance at the services from this and the neighboring counties and the many floral tributes, notably one from this society, showed the esteem in which he was held by all classes. His remains were interred in Gamble Cemetery beside his three children, who preceded him many years in the Great Beyond.

Born near Dadesville, Ala., in June, 1848, his education was obtained in the country school of his native village. Fired with the spirit of patriotism and the desire to serve his beloved Southland, he quit school, and at the age of sixteen enlisted as a private at Atlanta, Ga., in 1864, in the Confederate Army in Company G, Third Alabama Regiment, Engineers Corps, of Johnson's Brigade, serving until the surrender, taking an active part in battles in Tennessee, Alabama and Georgia.

Just after the war he was induced by a distant relative, the lamented Dr. Vineyard, to make his home with him in the village of Vineyard, Phillips County, Arkansas.

He engaged in teaching private schools quite successfully in the county for several years, to enable him to take up the profession of medicine, which he had decided to make his life's calling, reading and studying in Dr. Vineyard's office, when not occupied with school work.

With this preliminary medical knowledge, he further pursued his studies at Tulane University at New Orleans and the Kentucky School of Medicine at Louisville, Ky., graduating from the latter college in June, 1876. Locating in Vineyard, Ark., he associated himself with his preceptor, Dr. Vineyard, for the practice of medicine.

Two years after his graduation, and when professionally established in this county, he was married at Midway, Ark., to Miss Emma Forrest Turner, the only sister of Esquire James R. Turner, of Helena, and J. Carr Turner, of Poplar Grove, Ark. Her tender, loving and devoted ministrations during his last illness were most touching.

Four children blessed their union, only one surviving him, a son, John B. Pearson, now married and living in Little Rock, Ark.

A brother, Henry P. Pearson, living in Brinkley, Ark., and a sister, Mrs. Lawrence, in Chicago, Ill., also mourn his loss.

He moved from Vineyard to Spring Creek, Ark., practicing there for three years. In 1881 he located at Poplar Grove, Ark., where he resided continuously, leading an active, useful life as a competent and successful physician and good citizen to the hour of his death, literally "dying in harness," his last thought and act being the relief of a suffering patient.

In December, 1876, only a few months after he had settled down to practice the healing art, recognizing thus early the value of organized medicine, he applied for membership in this society and was admitted, being prior to his death the oldest member of the Phillips County Medical Society, with one exception, then living.

The history of this, the oldest and strongest, medical organization in the State, with which he has been so constantly and so intimately associated

almost since its birth, and the beginning and the end of his own professional career, are so closely interwoven as to be hardly separated.

Suffice it to say, that he was ever ready with counsel, advice, work and means to aid in the fulfilling of its mission, namely, the extension of medical knowledge and the advancement of medical science, the promotion of friendly intercourse among physicians, that the profession should be more capable and honorable within itself and thereby be more useful to the public in the prevention and the cure of disease, thereby prolonging and adding to the comfort and longevity of human life.

On the occasion of the delivery of his last presidential address, he felicitated the society and dwelt upon the success that had attended our efforts along the line of progressive medicine and predicted a future bright with promise for its further usefulness. His regularity in attendance at the meetings, his loyalty to its interests, his alertness to perform any and every duty for the good and welfare of the society, his ever cheerful and fraternal greeting, served to popularize him with the members, so that, when honors were to be bestowed he was usually remembered.

He filled the office of president four terms. His administrations were characterized, as was his whole life, with consideration, justice and impartiality and a conscientious discharge of whatever duty fell to his lot.

Dr. Pearson was a member of the Arkansas Medical, the American Medical and the Third District Medical Societies; he was this society's delegate at several meetings at the State and District Societies. He was also a member of the last County Medical Licensing Board up to the time of its dissolution.

For several years he had been a member of Sam Corleys Camp, Confederate Veterans' Association.

Dr. Pearson had a fine personality, a pleasing address, dignified, courteous and genial. In all the relations of life he was guided by the rules and principles of right conduct, and no personal sacrifice was too great for him in the conscientious discharge of duty.

In the relief of the sick and distressed, he responded with alacrity whenever and wherever professional duty called, irrespective of personal interests.

He was not unmindful of the golden rule, and in professional intercourse he was considerate and just to his colleagues.

And because he lived such a noble, useful life, devoted to his family, to his patrons, to the profession and to this society, we feel safe in the belief that when the final summons came "to join the innumerable caravan that moves to that mysterious realm, he was sustained and soothed by an unflinching trust, approached his grave like one who wraps the drapery of his couch about him and lies down to pleasant dreams."

Whereas, the Phillips County Medical Society has been called on to mourn the death of one of its pioneer members, Dr. M. L. Pearson, who departed this life at his home in Poplar Grove, Ark., on the 13th of December, 1909,

Resolved, That his death removes from our midst one of the oldest, most beloved, respected and valued members; one who contributed by his acts, his precept and example in a marked degree to the uplifting and upbuilding of the medical profession and this society.

Resolved, That the sick and distressed have lost a sympathetic friend and able physician, who was ever ready to serve them; the community a useful citizen; his family a devoted husband and father.

Resolved, That we share with the bereaved family their sorrow and their loss, and sympathize with them profoundly.

Resolved, That a page be set apart in our records to perpetuate his memory.

Resolved, That a copy of these resolutions and the memorial be given the family of the deceased; also to the Journal of the Arkansas Medical Society and the daily newspapers.

Respectfully submitted by

A. A. HORNOR,

J. W. BEAN,

M. FINK,

Committee.

Book Reviews.

Legal Medicine and Toxicology—By R. L. Emerson, A. B., M. D., member of the Massachusetts Medico-Legal Society. Cloth, 593 pages, with illustrations. Price, \$5.00. D. Appleton & Co., New York.

Physicians should have a working knowledge of forensic medicine and toxicology, and this single volume book, written to meet the needs of the general practitioner, covers the subjects pertinent to this special branch of medicine in a satisfactory manner. While some subjects are disposed of rather briefly, this is more than counterbalanced by the clear and practical manner in which the author presents the whole. The busy practitioner can have no trouble in finding the desired information. More than two hundred pages are devoted to extracts from various state laws affecting the practice of medicine.

A Manual of Chemistry—A guide to lectures and laboratory work for beginners in chemistry. A textbook specially adapted for students of medicine, pharmacy and dentistry. By W. Simon, Ph. D., M. D., professor of chemistry in the College of Physicians and Surgeons, Baltimore, and in the Baltimore College of Dental Surgery; emeritus professor in the Maryland College of Pharmacy; and Daniel Base, Ph. D., professor of chemistry in the Maryland College of Pharmacy. New (ninth) edition, enlarged and thoroughly revised. Octavo, 716 pages, with seventy-eight engravings and nine colored plates, illustrating sixty-four of the most important chemical tests. Cloth, \$3.00, net. Lea & Febiger, Philadelphia and New York, 1909.

The nine editions of this work shows its universal popularity, and the corresponding merit it must possess. Its success is due to the fact that it is written for students of medicine, pharmacy and dentistry.

It starts the beginner with the underlying physics of chemistry, and carries him through the principles to inorganic, analytical and organic chemistry, finishing with physiological chemistry, and includes the examination of urine. The physician and student have in this work one covering the ground.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lamhart, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
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 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Sollman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kehler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
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 Diseases of Children—F. T. Ishell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-1910.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwit, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, O. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

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County Society	President	Address	Secretary	Address
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Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
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Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
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Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammmon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	L. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
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Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
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Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Petus	El Dorado
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Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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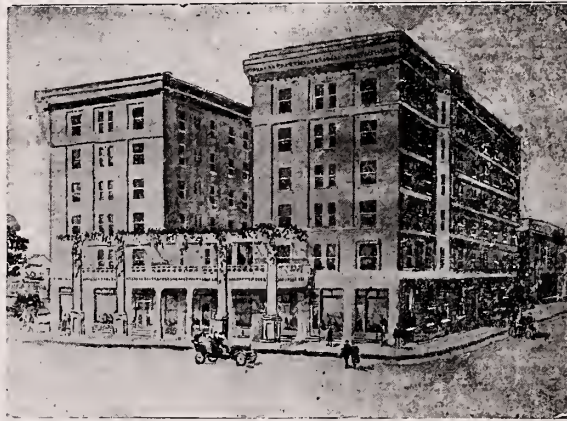
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In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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No. 9

Original Articles.

NEUROSES DUE TO PELVIC DISEASE, SURGICALLY TREATED.*

W. C. Dunaway, M. D., Little Rock.

We may with propriety refer to the past quarter of a century as the surgical era of the world's history. During that period technique has almost reached a state of perfection. Every part and organ of the body has been treated surgically, and, through the study of a living pathology, clinical manifestations of what were considered abnormal states not in the realm of the surgeon have received a new interpretation, and are now, in most instances, open to rational surgical treatment. Many serious neuroses and psychoses resulting from an irritated or traumatized vasomotor nerve are successfully reached only by surgical treatment as the first step—the step, before which no other is possible from a curative point of view. This truth is nowhere so brilliantly exemplified as in neuroses having as their basic causes irritations to the sympathetic through diseases of the genital tract, urinary tract and rectum, including the lower portion of the sigmoid. Deaver says there is perhaps no single word in medical terminology that has been made to cover so many deficiencies in learning and diagnostic acumen as the term "neurosis." Textbook classifications and etiological causes of neuroses vary so widely that just reason for doubt is the natural result, as to whether we really possess correct knowledge about this Protean monster we call neurosis.

When we begin to search for a satisfying conception of a neurosis it is very much like

seeking a comprehensive understanding of eternity. The more of authority we consult, the more of doubt we conceive, when at last we become overwhelmed by the many theories of heredity and embryology, and are sunk into the sea of uncertainty, crying for etiological light upon neurosis. However sad this uncertainty, I believe every man's experience is his best teacher if he properly analyzes his case and notes results had from practical work. It is fitting here that I should make acknowledgments to Dr. W. E. Green, of Little Rock, for the opportunity I had during the past five years, as an assistant in surgical practice, of making a very careful study of neuroses due to pelvic disease surgically treated. He is a pioneer in this work and was the first one to call my attention to the practical phases of the subject. We should be permitted to put aside present conflicting theories and accept as facts the results of practice.

For the purpose of this discussion, I shall assume that a neurosis of whatever nature, produced from pelvic disease, finds its basic cause in some irritation to the visceral ganglia of the vasomotor nerve, or to the pelvic plexus of spinal nerves. It may appear to some to be putting it a little too strong to say that any neurosis, from insanity down to the mild neuroses found in people with cold hands and feet, may be produced from some form of irritation to the pelvic nerve mechanism. I believe, however, this statement to be so nearly the truth that we may accept it as a practical working basis. From experience I am justified in asserting that when we treat our patients in this light we shall be rewarded by an extraordinary measure of success.

Some eminent authorities recently contend that there is no such relationship as cause and effect existing between pelvic disease and

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

the psychoneurotic phenomena of hysteria and neurasthenia. I cannot agree with this contention, for stigmata of embryological defect and hereditary influences would have landed the whole human family in the insane asylum or institutions for the feeble-minded if neuroses had for their basic causes developmental defects and stigmata. These conflicting beliefs promulgated by neurologists on the one hand and mechanical surgeons on the other are disappointing to us who honestly attempt to make practical applications of the most approved methods for the relief of the various neuroses arising from pelvic disease. We often feel as if we were left in the field of therapeutics with none to guide except conflicting authority. It has been my great pleasure to observe the cure of many serious neuroses, both psychic and somatic, by surgical treatment of certain pathologic conditions of the urinary tract, genital tract and rectum.

Embryonic features of the pelvic organs and their complicated and compactly anastomosed cerebrospinal and ganglionic nerve supply associates them as members of one family occupying the same house. The pelvic orifices and surrounding soft parts possess a double nerve supply, the spinal and sympathetic, with a preponderance of the spinal element. Inhibitory influences are prominent, with a strong tendency to excess of pain as a heritage from any and all forms of irritation to the parts, both local and reflected. The spinal nerve element to the vulva, urethra and bladder, and rectum, is practically from the same spinal segment. Therefore, answering to the law of Hilton, an irritation in one part will probably result in a reflex to any or all of the organs supplied by the same trunk. A rectal irritation will likely produce a bladder disturbance. An ulcerated or lacerated cervix uteri may produce gastric neuroses of a serious nature. A rectal disease will produce a neurosis of the intestine, expressed in the form of constipation, diarrhea, or fermentive disturbances. We have seen an ovarian disease upset the kidney and render its function pathologic.

Byron Robinson has seen cardiac lesions, hypertrophies and degenerations from a uterine fibroid. Pelvic disease is known to associate intimately with liver disease. In short, a neurosis of any organ of the body may be the product of pelvic disease, and serious

psychoneuroses may be added if relief does not come through the proper channel.

We must accept the teachings of anatomists and physiologists that the vasomotor, or ganglionic and cerebrospinal systems, constitute in a normal state a harmonious whole, that the vasomotor governs function and is not under volitional control; that the cerebrospinal is inhibitory and largely subject to volitional control. Normal function means life without any of its processes being disturbed. Any departure from the normal results in a neurosis of some degree, dependent upon the character of the insult to the ganglionic nervous system. If we put it in another light, the degree of nervous phenomena, both psychic and somatic, will be determined or expressed by the degree of pathologic physiology. The pelvic nerve mechanism is such that skin and mucous membranes, muscular and fascial structures and organs, are associated physiologically, and any irritation or pathologic lesion in any part or organ may be manifest in associated parts; and moreover, in distant organs. Who has not seen the glow and strength of manhood fade away and be replaced by brooding, melancholia and organ neuroses, following genital infections, strictures, ulcers, contracted meatuses and prostatic hypertrophies? An hypertrophied clitoris with an adherent hood with imprisoned smegma has been known to produce distressing neuroses in the female. I doubt not that many persons who are condemned to a life of loneliness and torture, in hospitals for the insane, could have been reclaimed to lives of usefulness by a proper treatment of the genital tract. It is a well-known fact among neurologists, as well as surgeons, that disease of the genitals is the most fruitful source of neuroses. The cause is at once apparent when we consider the wonderful and abundant nerve supply, and the many changes to which it is subjected during the course of one's life. The rhythm and secretory function of the genitals are in a state of reflex disturbance from the time the procreative function is ushered in, at puberty, till age suggests their inactivity, and they are condemned to their long night of functional death.

I cannot agree with neurologists who teach that in the main serious neuroses are due to "stigmata," and that surgical aid should rarely be sought; and neither do we agree with a class of mechanical surgeons, who rush

with their "commercial tool chest" to every form of neurosis and operate upon a pelvic organ whether innocent or guilty. There must be brought into requisition all the evidence in the case, and cause and effect must be correlated.

The great ganglionic nervous system, whose business it is to maintain human existence, must be consulted and made to answer, whether the neurosis in question is created and maintained by retention of effete material, lowered innervation and generally sluggish physiology, or whether it is due to a pathological condition or irritation of a pelvic organ that is constantly ringing up a reflex that disturbs function and the normal processes of life.

We must be physiologists if we would build worthily upon the surgical foundation made for us by the pioneers. Byron Robinson says the rush for the mechanical surgeon with his commercial tool chest and his accompanying bids for surgery "tend to scalp storms." He warns against the Pexyite, the Alexanderite and the oöphorectomist and such other enterprising surgical specialists who can find a pathological condition that explains the neurosis and justifies the motto, as announced in their circulars, "that they believe in operating upon anyone who will stand still."

It has been said on good authority that one-tenth of all disease should be treated surgically, and the remaining nine-tenths should be treated by all other means at our command. Of the truth of this statement I am unprepared to vouch, since I have no statistical data. I am sure, however, that the surgical treatment of neuroses due to pelvic diseases places the great responsibility upon the surgeon. He who attempts this work should thoroughly prepare himself. He should strive to have the fewest number of operations to his credit, instead of priding himself in having the greatest number. If he feels called upon to operate, he ought to be a wise physician, a practical neurologist and a good surgeon, and see to it that as few organs are mutilated or sacrificed as possible.

It is an easy matter to insult the pelvic plexus of nerves and produce an irremediable neurosis as a substitute for the one for which the operation was primarily done. For these and other similar reasons the laity are manifesting a justifiable distrust of commercial and mechanical surgery. I would sound a note of warning that we are entering upon

dangerous ground, and if I shall say something that will stimulate a more thorough study of the surgical treatment of neuroses due to pelvic disease I shall have accomplished gratifying results. I wish to say from experience that after a necessary and successful surgical treatment in many of these cases cure of the patient and that lifelong gratitude which is so pleasing to every one of us will depend most upon the after-care of the case. Kelly says the surgical work is the first step—the step before which no other is possible. If the family physician assumes a full measure of responsibility in the successful after-conduct of the case, and the details properly carried out, the cults of Christian Science, New Thought and Emmanuel movements would not feel called upon so often to complete the cure of these cases, and there would not be so many humiliating aspersions cast upon our profession.

It is not in the province of this discussion to go into after-treatment in detail, but I hope I may be pardoned if I refer particularly to one of the most important phases of after-treatment. There is a marked tendency to weakening of the abdominal wall, loss of muscular and fascial tone, while the patient is confined in bed. I therefore advocate early turning and movement, and as soon as the patient will bear it he must be gotten out of bed. Early and systematic gymnastics should be indulged to prevent a relaxed, flabby condition, particularly of the abdominal wall, the tendency to which is very strong and the occurrence of which tends to production of splanchnoptosis.

I have seen a marked general neurosis from splanchnoptosis continue the invalidism of a patient who would otherwise have recovered health.

Systematic gymnastics not only strengthen the musculature of the abdominal wall, but it results in a system of visceral massage, the relief of vascular and lymph stasis, stimulated innervation and increased nutrition. Where this is neglected many of these patients complain of feeling bloated, or getting rapidly fat, or an uncomfortable distension.

I believe all neuroses due to pelvic disease have their foundation in an irritation of the peripheral nerve apparatus. The belief that every pelvic organ is abundantly supplied by microscopic ganglia, distributed in its wall, along the course of the vascular and lymph supply, explains the frequent occurrence of troublesome neuroses with only a slight path-

ology, or one not demonstrable at all. The best service, then, in any case of physical or mental decline, is intervention that frees the ganglionic nervous system from every irritation. This is most effectively done by judicious discrimination between purely medical and purely surgical cases. The indicated treatment will usually be an employment of both methods.

In closing, I invite the severest criticisms from the society, and, if there have been statements made here which facts do not warrant, I shall be thankful for a ray of light. We live at the zenith of the world's civilization, and the greatest obligation upon us is to acknowledge our indebtedness to the pathfinders of the past quarter of a century. We should emulate their example and learn to weigh fairly and estimate justly the advantages and disadvantages of every departure from the beaten track, and our attitude should be responsive to every new thought; and, until revelation is closed, evolution must be progressive and interminable.

DISCUSSION.

Dr. Watkins—I do not know exactly what neurosis is. We use the term here and there specifically and more or less indiscriminately. We shall probably have to accept, for the purpose of discussion, the definition, "Some condition resulting from disturbed nervous function," and not from disturbed nervous anatomy. In fact that is the best description I can think of.

We must expect neuroses from pelvic lesion. I do not dispute the fact—and could not dispute it—that we find many disturbed nervous conditions. These nervous disturbances, or neuroses, are either due to somatic, or psychic pelvic lesions, and we may have also anatomical or pathological conditions, which may account for the neuroses. Thus we find that in a certain proportion of the uterine myomata there are no neuroses demonstrable. In others there are neuroses which can be accounted for upon a psychic basis. In others probably in 30 per cent, there are neuroses which can be traced to myoma. Pursuing these neuroses, we find pathological conditions produced, such as neuroses from malnutrition. I have had uterine hemorrhage enough to produce neurosis. Another anatomical basis for setting up certain neuroses in pelvic lesion, it seems to me, is in relaxed perineum with non-functionating levator ani, where we have consti-

pation, and, of course, retention within the bowel of toxic material, which may give rise to various disturbances of the alimentary tract and other portions of the body, and which are not necessarily purely reflex. That brings us to three points of reflex nervous disturbances brought out by Dr. Dunaway. I have often felt very uncertain how much I could have diagnosed in my cases; some I know I did not discover at all. I want to say right now that this is a good paper, and nobody here appreciates that fact more than I; but it is hard for me to trace symptoms of neuroses to reflex conditions in the pelvic organs, though I have seen some of these cases. Those where the patient was neurasthenic or neurotic anyhow were particularly difficult.

I had a woman patient in my office not long ago. She was "up in the air;" could not sleep. Presumably, she was just past her menopause. She had always had disturbances; had lacerated cervix; had given birth to eight or nine children; had relaxed perineum and prolapsed uterus, but whether that was the cause of her trouble I do not know. I began to think it was purely psychic. When I told her what the trouble was, she "went up in a balloon." I did the wrong thing in that instance; I should have known better. I should have judged my patient better before she "went up in the balloon."

I cannot afford to discuss any further the bearing of pelvic lesions upon the reflex of neuroses, because, as I have stated repeatedly, it is hard for me to trace it.

Dr. Sweatland—I have been very much interested in Dr. Dunaway's paper. The thing to me that seems most plausible in a condition of this kind is trauma. We have trauma existing in the pelvic cavity. Of course, we can get some bad results from it; as Dr. Dunaway calls them, "reflex irritations," and so on. We might call them that, though I do not think much of reflexes. Constant irritations, probably, in these traumas, whether it be from prolapsus uteri, prolapsed ovary, kinked tube, or anything of that kind, are traumatic. It is not anything else. You cannot place it under any other head but trauma. They can all be classified under that head if such a condition exists. If we reason them out from that we can very readily reason out all of the disturbances that we find coming from this condition. I do not think a laceration would give you so very

much trouble, as a rule. I do not think so great a number of these troubles occur, that are due to laceration, as was at one time believed. Lacerated cervixes do not necessarily give us these disturbances. Women come through a very severe laceration and never have any trouble of this kind. May have a cervix torn clear in two, and may also have lacerated perineum. Whatever it may be, there is little disturbance, unless it be too extensive. So that I find with these lacerations they do not produce as great a disturbance as was once believed; but if we do have a trauma pressure is generated, and as the doctor has explained, it is suspended on these terminal nerve ends, and so on. That is reflex disturbance, as he calls it. This can go on until the whole nervous system is thrown out of balance. With proper elimination the disturbance very soon disappears. We have in these cases retention of the urine and other waste products and the whole system becomes poisoned, the nerves are not receiving proper nourishment, and because of this they cannot eliminate the proper excretion. The whole nervous system becomes poisoned and we do not have the proper cell metabolism; consequently, we get all of these disturbances, cold hands, cold feet and cold, clammy extremities. Very simple indeed to reason it out, I think, along that line. I cannot reason them out from anything else but a trauma. Finally, we would have enervation following it and a general loss of nerve power later on. Those are the conditions that we will find; and I think, as a rule, we can trace them from trauma as a beginning.

Dr. Dorr—As I understand it, doctor, you used the word, neurosis, as a functional nervous disease, in contradistinction to organic nervous disease that has a pathological lesion? If you have a patient with gall bladder disease, they become very nervous—some of them extremely so. You go in and drain that gall bladder and cure the case. That certainly takes that case out of the class of neuroses, as the gall bladder trouble is the disease.

Another one is due to misplaced uterus. You correct the position of the uterus—and the patient gets well. You have certainly taken that out of the class of neuroses. That was the disease and not the nervous symptom that we give to so many troubles. Almost anything will make a fellow nervous. You get hold of a case. You do all you can

possibly; you cut out the cause of it; your patient gets well. I don't think that is purely a neurosis. You simply eliminate the cause and they get well. I think neurosis is simply a symptom complex. We use it because we do not know to what the trouble is due. Whenever we find out the exact condition and remove the cause and the patient gets well, that takes it out of the class of neuroses.

Dr. Watkins—The matter of neuroses, which Dr. Dorr spoke about, means traumatic disturbance of the nerves without anatomical disturbance of the nerve system.

Dr. Dorr—Without pathological lesions of the nervous system.

Dr. Watkins—My conception of the meaning of Dr. Dunaway's paper is that we get certain disturbances of the nervous system as the result of lesion or disturbance in the pelvic organs or in other organs. We have these neuroses; they are functional; trauma is suggested as a solution of the cause. I think it is a very poor one, but perhaps the best reason we can offer with our limited information. My belief is that it is a functional disturbance of the nervous system and not an anatomical one.

Dr. Dorr—It is a symptom instead of a disease?

Dr. Watkins—It is frequently so.

Dr. Snodgrass—I concur in Dr. Dorr's opinion; I believe that he is eminently correct. Unfortunately, the paper has the wrong title. If we have a nervous condition arising from trauma, as Dr. Sweatland has said, and the trauma is relieved, it could not be neurosis; very often we have trauma without nervous symptoms. I believe it is nerve entity. A condition which we have, whether it becomes neurotic or not. He talks of the great difficulties of sexual neurasthenia. These patients present a better field for study of this condition than any other. If we subjected the male genitalia to the same operations or trauma that we do the female, we would find a great many more neurotics among them.

Dr. Bledsoe—I think that Dr. Dunaway meant to say that the cases of neurasthenia and hysteria and so-called functional nervous disease are sometimes due to reflex disturbances. He merely stated that there was a train of nervous symptoms which follow certain reflex disturbances along the line which he suggests, which exist in the pelvic organs. Everybody knows that we have

many diseases that neurologists call "functional nervous diseases," psychic neurosis, or neurosis of whatever name you may choose to call it; but it is well understood that each one has its own definite complications and follows a definite train of symptoms. Very often we are able to make a diagnosis of these cases of neurasthenia; these cases of hysteria, these cases of psychic neurosis, when we are not able to demonstrate any pathological basis for it at all. I might modify this statement possibly in respect to neurasthenia that we could prove a certain amount of anatomical lesion as a pathological basis.

Dr. Dunaway—In the discussion there seems to have been a misconception on the part of some of the gentlemen as to my intended definition of a neurosis. My belief is that a neurosis, as it applies to the conditions as announced in the title of the paper, is a real disturbance of organic function, produced by remediable lesions of any one or more of the pelvic organs. This disturbance of organic function is the result of a reflex from a diseased organ to one that is healthy. There may not be demonstrable pathology at first, but if the function is perverted long enough there will result a gross pathology.

I thank these gentlemen for the generous discussion.

MALIGNANT MALARIA (COMATOSE FORM).*

F. O. Mahoney, M. D., Huttig.

Mr. ———; white, male, German descent, age forty-four.

I was called to see him on August 30, 1908, and found a man about forty-five years of age lying on a mattress in the corner of the room with no clothing nor bedclothes and with mosquitoes so thick that you could see them in swarms. The room was very hot and dirty with odor very similar to that of a sick room that had never been aired. Family and past history unobtainable on account of patient not speaking English sufficiently to be understood with any degree of satisfaction. He complained of chilly feeling but gave no history of a distinct chill; complained of getting cold and then hot, headache, backache and legs aching. Said

there was something the matter with his heart, complained of smothering spells. Constipated and urine was of reddish brown muddy color and not very free.

Physical Examination.—He had been a blonde, but hair now had a dull, lifeless color, skin yellow, large bones, and would have been a large man but was very much emaciated and thin; eyes sunken and of a dull color, sclera yellow, cheeks pale and yellow, teeth bad, breath offensive, tongue flat, heavy, flabby, thick with whitish-yellow coat, with print of molar teeth along the edges; carotid arteries could be seen pulsating in the neck; heart and lungs appeared normal; liver and spleen enlarged; kidneys not palpable; radial artery showed a beginning arteriosclerosis. Diagnosis of malaria was made and six tablets containing the following were ordered one every hour; calomel two grains, sodii bicarbonate two grains and podophyllin one-half grain. Tablets to be followed by the administration of salts (magnesium sulphate) the next morning. As I could get no definite history as to the time of day nor the day to expect the chill, I left capsules of quinin containing five grains each, to be taken one capsule every three hours during the day.

Next morning I found the patient no better—practically the same—only duller. Did not seem to care for anything. I found the medicine on the table as I had left it with only one tablet missing. Patient would not talk, but I found out from his partner the reason the medicine had not been taken—patient complained of it being bad and "no good" and he had not given any more. I tried to impress him with the necessity of giving the medicine and after he promised to see that he got it I left.

Next morning, September 1, the city marshal was called to arrest my patient for indecency. It was said that he was walking or rather staggering around the yard naked. I accompanied the marshal and we found the patient on his mattress in a semicomatose condition. He could be only partially aroused by an effort on our part. There was a lump on back of head about size of hand, presumably where he had fallen while in yard. He rapidly passed into a state of coma. Cold sweat broke out around the forehead, the limbs and abdomen had a cold, clammy feeling. Was not able to obtain the pulse at wrist. The eyes had a fixed stare, the respiration was good but slow,

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about fourteen to the minute. He did not seem to be in any pain. Had no convulsions. I gave hypodermically one-fortieth grain strychnin and in about ten minutes the cheeks had a slight flush and the pulse was perceptible. He had not received any of the medicine that had been left for him three days previously. I aroused him in about half an hour to a semiconscious state and tried to give him two capsules. He took the capsules in his mouth and drank three cups of water. Four minutes later he spit up the mangled forms of two capsules which had not been broken and immediately relapsed into his stupor. I returned to my office and went back to see my patient in about half an hour with some five grain tablets of quinin and a fountain syringe. I found the patient's partner had deserted him and left town. With the aid of a negro that Dr. Rowland had secured to attend him I gave him high enemata. There was a little passage, possibly half a teacupful. I then catheterized him, or at least attempted catheterization, which stimulated the bladder muscles and caused him to void a teacupful of muddy yellowish brown urine. I then gave him hypodermatically twenty grains of quinin and one-fortieth grain of strychnin. Ordered the negro to bathe him and to put on what underwear he had. In the quinin injection I used the ordinary pocket hypodermic syringe for want of a larger one and this necessitated four injections for the twenty grains of quinin.

On the third I returned about 10 o'clock and found patient in practically same condition as on preceding day. Negro attendant reported that patient had not roused up during the night and that he had not been able to get anything down him, not even water. The same treatment was repeated. Had him given another bath, bought clean clothes and bed clothes.

Returned fourth day and found patient's condition unchanged except had passed urine. Treatment repeated.

Fifth day: Returned and found patient in a profound coma, respiration about fourteen, pulse hard to find and quick and weak. Temperature, —. Bowels still had not moved, kidneys only scantily and the urine was highly colored. We gave another high hot saline enema and bowels moved scantily and kidneys moved freely. Repeated quinin hypodermically, twenty grains, and strychnin

one-fortieth grain. I noticed a redness and swelling of arms and chest in places where I had given the hypodermics.

Sixth day: Patient seemed some better and negro reported that he drank three cups of water, bowels moved scantily and kidneys freely. Pulse rapid and weak, respiration slow but heavy. He was still in coma when I was there but had recognized the negro earlier in the morning. Treatment was repeated.

Seventh day: Little change from yesterday. Treatment repeated.

Eighth day: Early in the morning patient roused up, called for water and drank three glasses, bowels moved scantily and kidneys freely. At ten o'clock I was able to arouse him again and gave him more water. Almost immediately he lapsed into coma again. I had negro attendant get some milk and try to get him to drink it. Twenty grains quinin was again given by needle.

Ninth day: Patient aroused on my arrival, talked some, complained bitterly of soreness of arms and chest. I repeated quinin treatment by needle under much protest from him. Bowels and kidneys both moved. Patient had taken three glasses of milk in last twenty-four hours.

Tenth day: Patient much improved. Knew me well and complained bitterly of sore arms and chest.

I gave him one-half ounce of epsom salts; he drank part of it and then refused to drink any more of anything, but when I informed him that I would put it in his arm he immediately emptied the glass and signified his willingness to take any and all medicines. I now proceeded to give him calomel ten grains, sodii bicarbonate ten grains and podophyllin two and a half grains in five doses. Prescribed salts for morning. Gave him tablespoonful syrup quinin every three hours through the day and one or two doses during the night should patient awake of his own accord. I had negro attendant get him strained beef soup, milk, etc. Gave one-half cup every two hours.

Patient improved slowly but steadily from this on. The bowels were very obstinate and salts was given every other morning and a compound cathartic (improved) every other night. He gradually improved and his diet was improved with him until the 26th of September, when he was able to attend to his own wants and the negro was relieved.

He began coming to my office to have the hypodermic ulcers on his arms treated. I kept them clean, washing them with bichloride and using a dry dusting powder. The bruised place on his head now occupied my attention. There had been a bruised place over the occiput about four inches in diameter. The hair and skin from this area seemed to have been gradually pushed off, leaving a raw red surface ranging from one-eighth to one-half inch higher than the surrounding parts. On each of his visits to my office (which was every day) I burned the surface with silver nitrate ag. No. 3 and put on dry dressing, using boracic acid. There was a steady improvement. About a week after patient had been coming to my office he became bloated, eyes puffy, hands, forearms, feet and legs to knees very much swollen. Urine scanty, bowels sluggish. The syrup of quinin was kept up every three hours. Administered another calomel purge, followed by magnesium sulphate and a light dose of same ordered for every morning. Ordered to drink large quantities of water. Given a tonic pill every four hours, composed of strychnin three one-hundredths grain, reduced iron one and one-fifth grains, purified aloes one-fifth grain, arsenous acid one-twentieth grain and quinin sulphate one and one-fifth grains.

The swelling all disappeared in three days and patient was able to resume his usual labor after a week. The sore on occiput was not larger than a dollar now. He was still under treatment for the hypodermic ulcers when he left town.

RACE SUICIDE AS THE MEDICAL MAN SEES IT.*

E. E. Barlow, M. D., Dermott.

The question of the fecundity of woman and of the country's birth rate deeply concerns the medical man, as well as the laity, from both a civic and professional standpoint.

In a discussion such as this, we depict the progress of obstetric and gynecic science, and the demonstrable results of such progress, which we might well expect to find in a healthier activity of the reproductive functions, in the greater fertility of woman, and

in an increased birth rate. The progress of sanitary and medical science is revealed in positive, tangible results, illustrated in the control of infectious diseases and epidemics, and a decrease in the death rate throughout this civilized world.

May we not reasonably look for corresponding general and positive results from the progress of obstetric and gynecic science, that science which has for its object the treatment and relief of conditions which cause suffering and prevent the healthy performance of the sexual functions of menstruation, ovulation and parturition? We should reasonably expect a betterment of such functions as indicated by greater fecundity and an increased birth rate.

But this is not true. Far from it. On the contrary, the rate of sterility and the number of miscarriages are increasing, and the birth rate is growing less. President Roosevelt and many others have given us the social side of this question, so I will have but little to say along that line.

As you all well know, the birth rate in this country, as well as in England, Wales and France, is on the decrease. It is not in keeping with modern society to raise large families. The modern family of today consists of husband and wife, a fountain syringe and whirling spray, and a few anti-septic tablets of some sort. The causes of this decreased birth rate are evident to every medical man, and above all to the obstetrician who is called in to complete the abortion inaugurated by criminal hands when methods of prevention have failed and accidents have occurred; and they are equally evident to the gynecologist whose consulting rooms are crowded with women suffering from consequences of their efforts to escape maternity.

The increased demand for luxury in daily life no doubt is influential, and the most important factor is the deliberate and voluntary avoidance or the prevention of child-bearing on the part of a steadily increasing number of married women, who not only prefer to have but few children, but who know how to obtain their wishes. It looks as if there is a prevalent and growing intention, even at the cost of both good morals and law, to let the inferior class bear most of the children. Many of the families which are best fitted for the rearing of children, so far as pecuniary means and social opportunity are concerned, are deliberately

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choosing to be unfruitful. The surgeon will tell you that more of his patients come from this class than from those to whom maternity has brought its natural ills.

In the United States the question of low birth rate has assumed the importance of a national problem, and has engaged the thoughtful attention and study of some of our most distinguished educators, sociologists and statesmen. Its designation as "race suicide" would form the assumption that the low birth rate is in all cases voluntary and independent of physical causes relating to the health or productive capacity of the married partners; but there is certainly sufficient reason for the belief that in a large proportion of cases the low birth rate is not the result of choice, but of incapacity, and the most important cause of that incapacity is, in my opinion, gonorrhea.

The influence of gonorrheal infection in women upon their conceptional capacity and upon the course and termination of pregnancy is of special interest from the viewpoint of race perpetuation. It is a well-known fact that gonorrhea exercises an inhibitory influence upon the procreative capacity of women.

Neisser declares that more than 45 per cent of the involuntary, childless marriages is due to gonorrhea; others put it still higher. It is a fact, however, that the proportion of sterile marriages due to gonorrhea is an unknown and unknowable quantity, but upon the mere statement of the fact that there is such a vast amount of sterility, and that gonorrhea is a common and most efficient cause, we can but conclude that the proportion due to this factor must be considerable.

One of the most pathetic pictures the physician sees is that poor, unfortunate woman, who has been balked in her instinctive desire for children, and who goes from one physician to another in the hope of having her sterility cured. Through the instinct and craving for maternity, she will at any cost of time and pain submit herself to any treatment which promises relief, and the satire of it all is that in many cases the husband, inflated with the sense of his own virility, is himself responsible for that sterility. Groos states that 17 per cent of sterility is due to the husbands.

I shall not discuss the pathology of gonorrhea in the female, as time and space will

not permit, but suffice it to say that the proportion of sterility in the female, as in the male, admits of a purely mechanical explanation. It is caused by the blocking up, or deviation, of the channels of communication between the ovaries and the uterine receptacle of the ovum. This may result from stenosis, imperviousness of the oviducts, or the dislocation of the normal anatomical relations between the uterus and its adnexa, from adhesions, displacements, etc. Before these profound alterations in the normal relations of the parts take place, the gonorrheal woman may fully conserve her conceptional capacity. In a majority of cases the first pregnancy which may terminate either in an abortion or accouchment, opens the gates to the infection which may have been long installed in the external genital canal, and permits its ascension to the tubes, ovaries and peritoneum, with the production of those changes which result in a mechanical obstruction. In many cases the aptitude of gonorrheal women for conception is often extinguished by the first pregnancy; hence the one-child sterility.

The prevention of conception and the criminal termination of the same after preventative measures have failed to accomplish their purpose have always existed and always will exist, and it seems that there is little, if anything, to be done by the medical man to prevent it. The class that are practicing these procedures are criminal by choice and will receive their reward in the final judgment. But the true and honest woman who seeks maternity, begs the physician to do something to relieve her of her sterility which has been brought about by gonorrheal or syphilitic infection transmitted to her by her husband, belongs to a class that we can and should protect.

The most effective remedy available to modify or lessen the appalling evils, both moral and physical, which flow from venereal diseases is the general dissemination of knowledge, representing the dangers and modes of infections of these diseases. The persuasive force of enlightenment will combat the dense ignorance which prevails among the laity, especially among the young, upon whom the incidents of these diseases most heavily fall.

If a young man, in addition to his education in sexual hygiene, is instructed in a knowledge of the fact that venereal diseases are the most invariable concomitant of li-

centious living, he will be better prepared physically to enter the matrimonial state. If he is brought to know that such indulgence is not wholesome for him; that it carries with it consequences to himself and to others, often so disastrous as to impair his health, vitiate his manhood and lead to a forfeiture if all those hopes and aspirations which are to be fulfilled in a safe, fruitful and happy marriage, he will forbear the indiscriminate practice of sexual indulgence.

If a man will not heed these instructions but will give himself up to sexual debauch and contract disease, let him keep it to himself, and not introduce it into marriage. Let him not infuse the vile taint of the prostitute into the pure young woman who receives him as her husband, and into her children, who are a part of her being. Such a crime entails suffering, shame, disease and death upon the innocent.

ADDRESS READ AT THE MEETING OF
THE ARKANSAS ASSOCIATION FOR
THE RELIEF AND CONTROL OF
TUBERCULOSIS, AT PINE
BLUFF.

Prof. Junius Jordan, Pine Bluff.

Ladies and Gentlemen: I feel very much embarrassed tonight in the position in which my friends have placed me. When I was invited to deliver a lecture on this subject, I shrank from that duty and responsibility because the odds were so overwhelmingly against me to attempt to discuss tuberculosis in the presence of this galaxy of learned physicians, and at the same time that would be instructive and entertaining. However, I consoled myself with the thought that possibly I might be in the position of a very learned citizen of this town who had the reputation of being a walking encyclopedia. His friends were once discussing his vast volume of knowledge. When the symposium had closed one of the mature-minded philosophers of the crowd said, "Well, Colonel can talk with more interest about a subject that he does not know anything about than he does with reference to one on which he is thoroughly informed."

I might tell you a little anecdote to illustrate just how I feel this evening. I was over in Chattanooga about a year ago, visiting some friends; spent a delightful summer. I was asked one evening by one of

the boarders if I didn't want to go around to a minstrel show called the "Police Court." I consented and we went around. There was an Irishman who came in. He was all mixed up the same as if he had run against a buzz-saw, a catapult and a couple of battering rams all in one. The judge asked him what was the matter. He said: "You see, Judge, it was this way. I have a job digging out a vault for a bank building. It was too hard to do by myself. I went over to Tim Murphy's house; I got there about 6 o'clock in the afternoon. I asked Mrs. Murphy if Tim was in; she said he was not. I said, 'I want him to help me to do a job of excavating tomorrow morning.' 'Step in and take a bite of bread,' said she; 'Tim will be here in a few minutes. In the meantime you take the baby and keep him quiet for me.' I took the baby and began to sing an Irish song. The baby began to kick and squall. Tim came in and says, 'How are you getting along?' I said, 'Begorra, I am trying to hold my own.' Then the fight began."

Now, my friends, the fight is on. I suppose I shall be slightly disfigured like my friend, the Irishman. The fact of the business is we have met here on a very important proposition; one that appeals not only to the sympathies, but to the intelligent activities of every right-minded citizen of the United States. I am very proud of the fact that the initiative has been taken in Arkansas in reference to this crusade against one of the most fearful evils that affect the physical nature of our people. We want to stop and study this question in its various features, consisting not only of its inroads upon humanity, but the direct pecuniary loss to our people as well as the nation.

I have been able to gather some statistics in reference to the economics, so to speak, of this subject, which are quite startling. I want first to look at them, then study them. At first I feared they were incorrect; but after examining and comparing them through other sources I found they were reasonably correct and fair.

Now, my friends, I will give you some of the statistics gathered by the government of the United States.

In 1907, 200,000 people died in the United States of tuberculosis of some form. Now, that is, you might say from a very limited registration, because there are a great many states and communities that do not keep any

registration of the character of the deaths that take place and there are districts that have neglected to keep these statistics. So from the limited registration in the United States we find that 200,000 persons fell as victims of tuberculosis in some form in 1907. Now, this is a remarkable presentation of this with reference to the ages at which the people died. For instance, 28 per cent died of lung tuberculosis, between twenty-five and thirty-four. I am speaking of 28 per cent of the 200,000. These statistics are taken from the government report. Twenty-one per cent died between the ages of fifteen and twenty-four; 20 per cent between thirty-five and forty-four.

Now, my friends, there is something alarming about that, and that is suggested by the fact that tuberculosis favors no period in life, and at any period in life in which the disease is contracted, death ensues. I wish to make an emphatic presentation tonight, that we ought to establish in some way in this state of ours and in other states a method of eliminating this danger from our public schools.

Now, take the difference between the cities and towns and the rural districts: For the year 1906, 181.5 out of a population of 100,000 died, while in the country only 121 out of 100,000 died. According to the census of 1900, 204.8 out of 100,000 died of tuberculosis in the United States. Owing to the crowded condition of the tenement houses poorly built, 204 out of 100,000 died, while only 134 died in the rural districts. This is outside of the municipal boundary radius ten to twenty miles. In 1890, 203 died out of 100,000. In 1906, 181 out of 100,000. So that you will notice the contrast between the deaths in the country and the deaths in the city, the danger is largely against the city. Now, why is the death rate larger in proportion to the same population in the city than in the country? It is due to the fact of open air, exercise, better diet and dry, ventilated rooms. Purity of the country atmosphere had a great deal to do with the prolonging of human life, giving to the human system vitality necessary to throw off and eliminate the disease if one's body was infected. In 1890 to 1900, one-fourth of the young and middle ages up to forty-four and nearly one-third of advanced age were infected by this terrible disease.

Dr. Hoffman in his statistics (and he is regarded as authority) says that 150,000 die from young to the age of thirty-five. He says furthermore that the net value of human life after thirty-five years is \$50.00 per annum; that is, net profit to the individual; but the death rate is so great that the nation loses \$240,000,000.00 annually from the productive capacity and power of the wage-earner. My friends, this is the terrible fact that confronts us in regard to this disease; for \$240,000,000.00 are lost in a year to the wealth of the nation, to the wealth of the community, and when it is distributed pro rata would have been saved to the community and the nation, if we had adopted some plan to reduce the death rate one-half, we would then have saved to the wealth of the nation, and the accumulation of interest-bearing results of labor \$120,000,000.00 annually. So there is the economic consideration in the reduction of the death rate, provided we adopt means to reduce it one-half.

Now, we don't estimate in those millions another important fact. It is a very serious one. While we are losing that \$240,000,000.00 from the productive energy and accumulation of the nation's wealth, what has society lost? What agencies for good in church and state and civilization are dissipated to the winds by this terrible death rate? Families have been deprived of their protectors, communities have to provide means to take care of the families of the deceased and the disease is spread further. Whenever a wage-earner dies who is in good standing in his community, we have lost from the church, from the state, from society and from the home an element, a factor, that cannot be supplied by the beneficence of the community or the state; it can only be relieved by kindness and generosity. We cannot estimate the value of a human life; its value to the family and to the community.

It seems to me that very frequently we are inclined to place a very low estimate upon the individuality of the humble citizen of the commonwealth. When a faithful citizen is removed prematurely we begin to arouse ourselves to the fact that a wage-earner is gone, an element of strength is lost to the community in which we live, a family is left without a protector.

The mortality from tuberculosis is a problem compared with which all other problems

of a medical character sink into insignificance. It is safe to say that the possible prevention of the spread of the disease may be established. It is worthy the solicitude and the earnest, untiring effort of all who wish to blot out this terrible scourge and take it from the world. An arrow that flies in the darkness, a pestilence which stalketh in the noonday sun.

Collier's Weekly is regarded as good authority on subjects of this kind. In July, 1908, Dr. Hunter, who was president of the Prudential Life Insurance Company, who, by the way, is regarded by the government, as well as by the people of his state, as a man of great information and a reliable authority, says that the average cost of preparing a man for the industrial pursuits, so that he will become a wage-earner, is \$1,500.00. In my opinion that is a little strong; but he puts it there, to prepare him to be a capable, educated, thrifty man, a man of versatility. He has the spirit of adaptability, he can adjust himself not only to the position in which he finds himself, but will lift himself still higher, and by saving of his earnings, become a small-sized capitalist. This man will sacrifice from year to year until by experience and perseverance he becomes qualified to take his position anywhere. And then he has expended fifteen hundred dollars in experience and sacrifice, money and time to acquire his industrial and economic facility.

If we could master tuberculosis there would be a saving in money to the United States and the whole world by virtue of the fact that this man had made himself capable after the expenditure of fifteen hundred dollars to accumulate three hundred dollars per year.

There would be a saving to the United States of \$330,000,000.00 in one year. This remarkable presentation of statistics shows that the wage-earner a thrifty man, is absolutely so important an item to this country that we lose \$330,000,000.00 of wealth, the product of his labor, if he is prematurely carried off between the ages of twenty-five and thirty-four, where the greatest mortality is recorded in reference to this matter. Dr. Hoffman tries to establish an approximate measure of social and economic value of life. He goes over the question very thoroughly. He says the life period of industrial activity is between fifteen and sixty-five, granting to a man fifty years of active, healthful ac-

tivity in the production of the necessities of life and the accumulation of some wealth to take care of him when he grows old. Between those ages, says Hoffman, of fifteen to sixty-five, there is 28 per cent of the people dying of tuberculosis on an average population of 200,000. This gives, he says, fifty years of life in industrial pursuit and the continuous accumulation of something for the community and to add to the wealth of the nation. Let premature death come and strike down this wage-earner; then, there is a gap here to supply, there is a necessary piece of machinery gone from the mechanism of the country that cannot be well supplied. Society, the church and the state have all suffered a loss. Right there in that great volume of population between the ages of fifteen and sixty-five, when a healthy body and a good active soul are to go forth in the effort to lift one's self and his family above the insidious temptation and try to establish for them a protection against the dangers, the vicissitudes and the calamities of life. It is this economic gain to society, this value of the manufactured product over and above the wages and the necessary cost of production, that we must look to when we begin the accumulation of funds to take care of us against the calamities of life. He says the product of accumulation, after taking from it the expenses of living and the sacrifices made for taking care of our families, are contributions to society and to the state, representing, possibly, three hundred dollars per annum, and it is a good average for all the population between the ages of fifteen and sixty-five. This economic value must be brought to the attention of the people of the United States; because it is so clear that it is economy to the state, it is economy to the church and it is economy to society to devise some means to restrict, and, if possible, eliminate this dreadful scourge. Economic value in every industrial life and every gain in human longevity above fifteen and below sixty-five represents corresponding gain in accumulation, represents a corresponding gain in wealth. That means inasmuch as you prolong the healthful life of the laboring man, or the man of industry in whatever capacity he may be engaged, you add that much to the wealth of the nation and the social and moral advantages of the community. "The variations of industrial efficiency," says Dr. Hunter, "are such that it is safe to assume that \$300.00 per year

is a good approximation of accumulation for male wage-earners in mechanics and manufactures."

He says further that the returns of labor are higher in the raising of food and kindred products in the work of metal ware, paper, printing, chemicals, etc. The income is lower in textiles, leather, clay, tobacco, etc. Allowing for lower wages of women and children, \$300.00 per annum is properly verified by experience. People gain less when young, though fairly the same gain comes between the ages of thirty and fifty years, the dangerous period for life to be eliminated by the growth and spread of tuberculosis.

Physical power is supposed to decrease, he says, after fifty years. A decline in the resisting power and in the aggressiveness of human nature. After that period if there has been an exposure of the system to tuberculosis, they are more apt to take it in a run-down condition than when in the vigorous period of life. He says the economic loss by the community is due to premature mortality. In other words, if a man earns \$300.00 per year for fifty years (I mean by that, if he allows it to accumulate and be added to his estate), he ought, in fifty years, to have \$15,000.00 to his credit. Death at twenty-five, then, means an economic loss to society and to the church and to the state of \$13,695.00; if he dies at thirty-five, \$10,395.00; at fifty, \$4,405.00, and at sixty there would be a loss of \$1,090.00. At the end of his industrial life he would lose only \$175.00.

Now, my friends, the approximate average death from tuberculosis is at the age of thirty-five, said to be about 28 per cent. Net total amount of loss in registration limited to the productive age class, in one year, \$275,030,910.00. Is it not an appalling statement of fact that this great loss is due to tuberculosis? It is a strange thing to me that so very intelligent people as ours, whose very brain has been thrilled with progress and the development of scientific knowledge, the great height that has been reached in the development of science, we have stood in the presence of this terrible disease, destroying life so rapidly and depriving us of so much economically. Yes, we have stood there apparently as with indifference and utterly unable to muster courage for the attack upon a condition which we ought to have prevented long ago. We should have provided some means for

resisting the spread and growth of this dreadful and far-reaching condition which we have allowed to flourish among our population for so long a time.

It is a sad thought, my friends, that you might travel from Jacksonville, Fla., traversing every mile of coast, to New Orleans and to Galveston, Tex., then across New Mexico, Arizona and California, then across Nevada and what do you find?

Most appalling to the human mind is the consideration of the fact that it is an ever-widening belt made by the ravages of this terrible disease, tuberculosis, which laughs indifferently, so to speak, at the scientific minds and energetic powers of the American nation. So when it is coming to pass that the consumptives are rapidly populating that latitude, that district to which I call your attention, does it not invite the widest criticism, and is it not a means of reproach upon our people that we have been slow to put a stop to this terrible scourge? We have the ability and the knowledge, but possibly we have had lack of means. But where there's a will there's a way, and I am proud to say that Dr. Shibley has taken the initiative in this matter and has gathered around him some of the very best medical talent in the United States. He has started a co-operative plan of endeavor which will soon rid our state of the four or five thousand consumptives which you now have registered here. He has succeeded in getting the legislature to pass an act appropriating \$50,000.00 for the erection of a hospital for the purpose of treating this awful disease, adding that much to our facilities for removing it from our communities at large.

Now, in reference to our schools. We see here by these statistics that it begins early in life. Should there not be laws passed by the United States and some way devised by which these things might be brought to the attention of our people? Let regular notice be served upon these people and let the children be eliminated from the schools in some way, where they will not endanger or injure the lives of the other children.

I am not speaking about communities, but I am speaking of the whole land at large. Is it necessary? Every organism of this society tells you that it is necessary. Then the statistics of the United States government tell us that it is necessary. Can we do it; ought we to do it; how will we do it; will we do it? is the proposition that now con-

fronts us. I say to these good physicians, you are a blessing to our nation and to humanity. They are doing more good than you are possibly aware or can imagine. Help them. Let us rally around them and give them our aid and influence, not only in words, but in coöperative sympathy and in cash; so that this great scourge may be lifted from out and amongst our people. Then we can bring back the roses to the cheeks where sickness feeds and health will be regained by plenty of rest, good food and pure air. Then we can go where the friendless stranger lies perishing in his gloom, snatch him from the grave, reopen his closing eyes and bring him back to civilization and restore him to his home and friends.

PELLAGRA.

ITS RECOGNITION IN ILLINOIS AND THE STEPS TAKEN TO CONTROL THE DISEASE.

The Peoria State Hospital is an institution with a resident population of 2,150 insane patients. It was opened in 1902 as the Illinois Asylum for the Incurable Insane, and operated under that name until 1907, when it was changed to the Illinois General Hospital for the Insane, which it retained until the present name was substituted by the recent legislature.

This short sketch of its history is necessary in order to explain the deplorable character of its inmates. Denied state care for half a century, the county almshouses were filled to the limit with incurables, who had been returned from the state institutions to make room for the ever-increasing stream of recent commitments, while the custodial wards of the same state institutions were overflowing with patients only awaiting transfer to the home of the incurables.

That such an institution should be made the dumping ground of the most undesirable patients was but natural, and to me fell the task of separating this mass into the semblance of order, and to try, in a measure, to have the state make amends for its long neglect of this army of unfortunates, and to give to these unconscious and unintentional offenders that humane and considerate care that the public conscience of the twentieth century demands.

The institution grew rapidly, and each suc-

cessive increase in its capacity only emphasized how urgently it was needed. Legislatures and governors were kind to it, until now it has thirty buildings, 600 acres of land, and represents an expenditure of over a million dollars.

The policy of non-restraint and non-imprisonment prevails in every ward, and the eight-hour tour of duty is adhered to without deviation. Again is this explanation necessary for the correct estimate of this article for the reason that the unchecked liberty exposes the patients to more sunlight than is customary in the care of the insane.

Every patient spends the entire day on the ground floor, with ample porches for the accommodation of the entire population of each ward or cottage. The average age of its patients is forty-seven years, and its annual death rate of 14 per cent, while about double that of the usual hospital for the insane, is not above what might be expected of such a population, especially when it is remembered that it maintains three tent colonies with a total of 160 consumptives.

It is estimated, now that it has been changed to a district hospital for the treatment of acute insane, more than fifteen years will elapse before the taint of incurability is removed. The adoption of a universal non-restraint policy caused its accidents, which were in no sense excessive, to be very closely scrutinized. Perhaps the one causing the most bitter criticism was one described as follows in the biennial report of 1906:

"The rush incident to the rapid growth of the institution, when patients were received at the rate of 200 a month, was attended by a fatality in the death of Fred Weber, due to scalds received while being bathed by an incompetent attendant. The case was promptly placed in the hands of the coroner, as is every unusual death in this institution, and a searching investigation ordered. The verdict censured the attendant, but charged no criminal neglect."

Even if the public had been inclined to overlook this, a repetition the next year only intensified the suspicions that are apt to center about an insane asylum. Our second case is described as follows in the published report of 1908:

"The death of George Wright, who was scalded on the morning of November 25, was directly due to incompetence. He was an untidy and partially paralytic epileptic.

"We maintain two night nurses in our epileptic colony for men, and on the morning in question the nurse on duty, while bathing him preparatory to turning her patients over to the day force in a presentable condition scalded him about the feet. He lived eleven days and died from an intercurrent pneumonia, but the coroner was called in, as in every other fatality, and the facts placed before him.

"We give three hundred and fifty thousand baths a year in this institution, and the work is performed by expert bathers who are retained for that purpose. In the hospitals and infirmaries the untidy patients are bathed by the nurses, and this patient passed into the hands of an incompetent person, who was promptly dismissed."

In both instances the attendants stoutly maintained that they did not scald the patients; that they had their own hands in the water and that it was not hot. The clinical notes of the cases show that the burns were of the first degree only, and that the area involved was not in itself sufficient to cause death. In the case of Weber there was a distinct line of demarcation from a line about three inches above the ankles extending to the plantar surface of the foot.

Wright's injuries were almost identical, but Weber had in addition a distinct bleb over each of the ischii. The jury in the case of Wright very reluctantly accepted scalds as the cause of death, especially since he survived eleven days. Both were in the terminal stage of dementia, and neither could have survived long, even in the absence of these supposed injuries.

The reader is asked to keep these cases in mind in view of what is to follow. No physician in Illinois would have had the temerity to assert that these were not scalds, and even with the opportunity of having a verdict rendered otherwise I felt that public confidence would be sooner obtained by placing the worst phase upon it than by apparently seeking to evade responsibility.

One of the annoying features of our death rate was the constantly recurring cases of summer diarrhea. It rapidly changed to enterocolitis, with collapse and death. These I considered preventable deaths, and in the face of assurances that they were an accompaniment of dementia, I felt that they were a reflection upon my administration.

I secured the ablest dietist that the Lewis

Institute of Chicago had graduated, and placed her in charge of the food supply. I ordered a crusade against flies, and, while every door and window of this institution is protected by fly screens, we covered every table and every garbage can and all food supplies with mosquito netting.

The dietist was given a graduate nurse to assist her, and later a woman physician was detailed to supervise the preparation of the food and to look out for the domestic hygiene. While these precautions had some effect in reducing the amount of intestinal disorder, we found ourselves confronted with another annoyance.

As far back as 1905 we noticed a number of extensive sunburns. The attendants usually ascribed them to the fact that the patients would lie on the grass in the shade and go to sleep while the shadows would move and leave them exposed to the sunlight, resulting very often in burns about the face and neck, and especially the back of the hands. These sunburns became so prevalent in 1908 that we were greatly embarrassed in case such a patient died, and my correspondence will show many instances where I wrote to the friends and made the best explanation that I could of the presence of these sunburns.

In no case were the burns sufficient in themselves to cause death, but, occurring as they did in patients who died after a diarrhea of five or six days, they were still visible in the corpse, and it was very difficult to convince the friends that the patient's arms had not been dipped in boiling water, or that concentrated lye or full-strength carbolic acid had not been spread over the face and neck. These deaths caused particular distress when they followed four or five days after we may have written a letter stating that the patient was in excellent physical condition.

In the case of a body shipped to Canada it required the utmost assurance on my part to convince a most excellent family that there had been no accident.

A devoted Swede family came to bury one of its members, and we called attention to extensive sunburns on the back of the hands. They were suspicious because of the unexpectedness of the death. They had visited the patient a week before and walked about the grounds with her, and declared that there were no sunburns then, and they accepted our explanation with mental reservation.

A consumptive in the tent colony died, and

the friends at home insisted that he was burned in a lamp explosion, although there is not an oil lamp in the institution.

In the winter these sunburns ceased, but it was not an unusual occurrence to have a case transferred to the hospital from the wards with extensive sloughs involving the genital parts.

Early in the present year I called the thirty head attendants into the library and gave them a strong admonition that sunburns must not occur in 1909. I cited their unusual number in the previous year, and showed them that, while most of the patients recovered and were returned to the cottages, in a number the burns were sufficiently severe to have contributed in a measure to a fatal termination of the disease, which was usually enterocolitis or general paralysis of the insane. I warned them that dismissal would follow a repetition of last year's conditions, and showed them how difficult it was to explain away such appearances, even if death from some other cause intervened.

Later the daily inspections showed that the lecture was having its effect. Most carefully and considerably the attendants moved the patients from the sunny to the shady side, but it seemed that all precautions were without avail.

I increased my staff of physicians to ten and apportioned the patients in a manner that gave them the maximum of supervision. A persistent, though mild, epidemic of smallpox compelled me to establish a quarantine hospital with a medical officer in charge, and the staff was instructed to be on the lookout for any skin symptoms.

Pellagra was receiving casual mention in the scientific and lay press, but in this latitude attracted but little attention. I made a special trip to Copenhagen last winter for the sole purpose of studying Finsen's Light Institute, and of the 120 cases of skin disease treated daily in that clinic, I did not see a single one of pellagra. However, when Assistant Physician F. J. Griffin reported a patient showing symptoms of the disease, I went to the bedside at once with him, and in one minute the scales of seven years fell from my eyes.

I went from ward to ward, and within an hour saw a dozen cases. Instantly I recalled the scaldings and the cases that had called for explanations. A hasty reference to the literature only strengthened my conclusion

that we had been dealing with pellagra unconsciously all this time.

A special meeting of the staff was called, and I presented the situation and cited case after case that could have been nothing else than pellagra. All recalled similar cases, and some accepted the theory of pellagra more readily than others, but the presentation of a dozen typical cases left little room for doubt in any mind.

I visited a patient who was sick in her room in our best ward. She was a laundress and of good physique, but had been failing for several days. The dorsum of the hands were erythematous, and her features indicated approaching collapse. She was immediately transferred to the hospital, where she survived but three days. The skin symptoms became intensified and the involvement of the buccal mucous membrane was pronounced, while a persistent diarrhea continued to the end. I wrote *pellagra* in the official death certificate, and the word will not be a strange one in our future death reports.

Feeling myself face to face with a grave situation, I availed myself of my former service in the medical department of the United States army, and wrote to the surgeons general of the United States army and of the Public Health and Marine Hospital Service to send experts from their respective departments to come out and study the disease. I also telegraphed Governor Deneen that we had twenty well-defined cases, and notified the State Board of Health.

Governor Deneen at once sent Dr. T. H. Griffiths, medical assistant in the office of the State Board of Health, to examine the patients. Three days later, August 13, Dr. James A. Egan, secretary of the board, who had been absent from the office at the time of my notification of the presence of the disease, visited the institution and examined all of the patients with me. Dr. Egan unhesitatingly agreed with the diagnosis of pellagra, on the examination of the first patient seen. On August 15 I was rewarded by a visit from Passed Assistant Surgeon C. H. Lavinder, United States Public Health and Marine Hospital Service, who examined the patients in company with Dr. Egan, who had again visited the institution, and myself.

After they had seen forty cases, nearly every one of which presented the clinical marks of the disease, Dr. Lavinder returned to South Carolina, where he is working in

conjunction with the state authorities in a laboratory installed in the Columbia State Hospital, and Dr. Egan returned to Springfield. Both officials were convinced that the disease was at last recognized in Illinois, and that it had probably been with us for years.

A week later Capt. Joseph F. Siler, of the medical corps of the United States army, reported with orders to spend a month, if necessary, in studying the origin, course and character of the disease, and Dr. Egan again came up from Springfield, thoroughly aroused to the fact that Illinois had to deal with a condition heretofore unrecognized.

Dr. Lavinder's stay was short. His instructions were to diagnose the disease if possible, and return to his post. His diagnosis was promptly made, and he reported his conclusions. His observations in the asylums of the Southern states made his visit at this time a particularly valuable one, and, although he leaned to the theory of spoiled corn as the cause, a position that could only arouse opposition in the greatest corn producing state in the world, our stand is that we must get down to the etiology of the disease, and if the cause is corn, the sooner we know it the better, and if not it is only proper that a constantly increasing article of diet should be absolved from all blame.

Dr. Siler went about the matter with that care and precision usual in the medical department of the army, and the liberal time at his disposal made it possible for him to make an individual study of each case. He was given the freedom of the institution, and the entire staff was instructed to coöperate for him.

Dr. Egan spent a day with Capt. Siler outlining the plan of procedure in the investigations. Two days later he secured the services of Dr. W. H. Buhlig, professor of clinical pathology, Northwestern University Medical School, to conduct pathologic and bacteriologic research for the board. Dr. Buhlig visited the institution shortly afterward, and,

with Capt. Siler, made arrangements for the equipment of the laboratory and for the carrying on of investigations. Dr. Buhlig will visit the laboratory from time to time giving us the benefit of his advice and counsel, and will also conduct experiments in Chicago with material collected here.

That the United States government is alive to the possibility that the disease may be more widespread than is popularly supposed is shown by the detail of the surgeon general of the army of Capt. H. J. Nichols, of the Medical Corps, to report at once to the Peoria State Hospital for an indefinite stay.

Capt. Nichols, who is considered the government's most accomplished bacteriologist, having been detailed abroad for three years to study and observe tropical diseases, arrived a few days later. He will have charge of the laboratory investigations, working with Mr. W. H. Holmes, Dr. Buhlig's assistant, who is also an expert bacteriologist. The state and army experiments will be conducted jointly, Captains Siler and Nichols having very kindly given their services to the work of the State Board of Health.

I believe that the situation has been intelligently and energetically met, and that many valuable observations will be made here. The accompanying report of Dr. Siler is of necessity only a brief outline of what he will report to the surgeon general, and which will finally reach us as a government publication.

Dr. Egan will present in the Bulletin in which this article appears a dozen or more photographs of some of the more pronounced cases, which were secured by Capt. Siler and myself through a skillful photographer.

I desire again to express my sincere appreciation of the aid and courtesies received at the hands of the secretary of the State Board of Health and the respective surgeons general.—George A. Zeller, M. D., Superintendent Peoria State Hospital, in Illinois State Board of Health Bulletin, August, 1909.

THE JOURNAL

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust building.

Editorials.

The annual dues for the State Society are now due. Send in your check to your county secretary, so he can remit to the secretary of the State Society.

The time is fast drawing near for the annual meeting of the State Society, which will be held in Little Rock, May 3, 4, 5 and 6, under the presidency of Dr. James H. Penov. This meeting should be the greatest in the history of the society, both in attendance and in the scientific work.

Every county and district society should have a reporter whose duty it is to gather all medical news of the county or district for publication in the Journal. I am asked every day why the Journal does not contain more

news. The reply is easy. I can't get the reports of our county society meetings. They seem to be jealously guarded lest the Journal publish a notice of them. Medical news notes sufficient to cover eight or ten pages should be sent in to the Journal every month from over the state, still, it is hard for us to gather enough for one page. Will you help the editor to make the Journal a readable one?

[A single erratum may knock out the brains of a whole passage.—Cowper.]

I wish to call attention to some errors that occurred in the January number of the Journal: Dr. James H. Chesnut was a collaborator with Dr. Laws in the paper on Extrauterine Pregnancy instead of Dr. William Chestnutt.

In discussion of Dr. Dorr, on page 225, first column, he is made to say: "If it is a surgical case, that surgical diagnosis and operation may cover one-half the pathology," when it should read: "If it is a surgical case, an operation may uncover several pathological conditions."

On page 225, second column, he is made to say: "I have never operated on any; have had 100 per cent recoveries." It should read: "I have never operated on many."

ARMY MEDICAL CORPS EXAMINATIONS AT WASHINGTON, CHICAGO AND SAN FRANCISCO.

The surgeon general of the army announces that the War Department has appointed permanent boards for the preliminary examination of applicants for appointment in the medical corps of the army to meet at Washington, D. C., Fort Sheridan (near Chicago), Ill., and San Francisco, Cal., in addition to the usual preliminary examination boards that are assembled at various army posts throughout the United States from time to time. The permanent boards will hold sessions on the second Monday of each month.

A limited number of successful candidates will be appointed first lieutenants in the medical reserve corps (salary \$2,000.00 per annum), and assigned to army posts until the next session of the Army Medical School, when they will be ordered to attend the school as "student candidates."

Applicants must be citizens of the United States, between twenty-two and thirty years of age, graduates of reputable medical schools, of good moral character and habits, and shall have had a year's hospital training after graduation, or its equivalent.

Full information concerning the examination can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C."

POSTOPERATIVE PNEUMONIA.

Risley bases his paper upon an analysis of the pulmonary complications of one thousand consecutive laparotomies, including radical cure of herniæ. An analysis has also been made of all other cases, 920 in number, operated on at the Massachusetts General Hospital during this same period. These cases cover the period between May, 1908, and February, 1909, and hence include all seasons of the year. The mortality in this series of laparotomies was 13 per cent. Post-operative pulmonary complications are most liable to develop in cases in which there is sepsis present, and in which some trauma has been done, not to the air passages, but to the peritoneum. This rather favors Payr's theory that all postoperative lung complications are due to minute emboli rather than to irritation by ether and infection through the air passages. Lung involvement was present in 3 per cent of all these cases before operation. Clean cases are nearly as liable to pulmonary complications as septic, but the mortality is practically nil and the cases themselves are of a typical form and much less severe. Previous pneumonic processes do not light up again after ether. Lung complications are more common during the winter months. Flare-ups in tuberculosis cases are fairly common. The exact percentage was not determined.—The Boston Medical and Surgical Journal, January 20, 1910.

Evans (Cal.) State Journal of Medicine says:

The care of the tuberculous patient, aside from the application of those great fundamental principles of treatment, comprised in out-of-door living, nutrition, the proper correlation of rest and exercise, etc., must

depend for a successful issue on the ability of the attendant to individualize. Failure is largely due to the application of a set of therapeutic principles, without taking into consideration individual type and temperament, stage and duration of the disease, the influence of occupation, method of living, and ancestry, all factors through which a thorough knowledge of the actual resistance of the individual must be obtained. It is as important to recognize the fact that a certain type of individual, if sent to a sanatorium, will assuredly become a victim to that very serious and almost helpless complication, nostalgia, as it is to realize that the only hope of success in the treatment of another type, whose ability to coöperate cannot be developed under the influences of home surroundings, is to place him under a daily hygienic discipline which can only be properly carried out under rigid institutional treatment.

CHANCELLOR MARTINEAU PERMANENTLY ENJOINS STATE BOARD FROM REVOKING LICENSE.

Chancellor Martineau on February 5 made permanent the temporary injunction which he had issued against the State Board of Medical Examiners, preventing the board from revoking the license of Dr. A. S. McCrary of Little Rock because he had publicly advertised that he would treat chronic and incurable diseases. The decision of the court declares part of act 219, passed by the last legislature, unconstitutional and void. The case will be appealed to the Supreme Court by the state.

Dr. McCrary is a licensed physician and he advertised that he would treat chronic diseases and also cure cancer. Under the act passed by the last legislature the Board of Medical Examiners was given the right to revoke a license should a physician advertise to do such things.

McCrary was cited to appear before the board and show cause why his license should not be revoked. Instead of appearing, he obtained a temporary injunction, the case coming up February 5 for final decision.

The court held that the part of the act prohibiting a physician from advertising to

treat and cure chronic or supposedly incurable diseases is vague and uncertain and therefore void. He said that the authorities in medicine do not agree on what diseases are curable and what are not curable and that under the law the State Board might classify certain diseases as incurable, when other authorities recognized by the medical profession might declare the same diseases to be curable.

MEETING OF COUNCIL ON MEDICAL EDUCATION AND COMMITTEE ON MEDICAL LEGISLATION.

The sixth annual conference of the Council on Medical Education and fifth annual conference of the Committee on Medical Legislation of the American Medical Association will be held in the Congress Hotel (formerly the Auditorium Annex), Chicago, February 28, March 1 and 2, 1910. Following is the program:

CONFERENCE ON MEDICAL EDUCATION.

First Day—Monday, February 28.

Morning Session, 10 a. m.:

1. Address of the Chairman—Dr. Arthur Dean Bevan.

2. Report of the Secretary—Dr. N. P. Colwell.

3. Report of the Special Committee on Practical Tests at State License Examinations—Dr. W. S. Fullerton, chairman, secretary of the Minnesota State Board of Medical Examiners, St. Paul; Dr. S. D. Van Meter, secretary of the Colorado State Board of Medical Examiners, Denver; Dr. George H. Matson, secretary of the Ohio State Board of Medical Registration and Examination, Columbus.

4. Discussion.

Afternoon Session, 2 p. m.:

5. Address—"Standards in Medical Education as Related to Standards in General Education."—Hon. Elmer Ellsworth Brown, United States Commissioner of Education, Washington, D. C.

6. Address—"The Obligation of the University to Medical Education."—President Henry S. Pritchett of the Carnegie Foundation for the Advancement of Teaching, New York City.

7. Address—"The Relation of the University to the Medical School."—President

J. G. Schurman of Cornell University, Ithaca, New York.

8. Address—"Some of the Functions of a University Medical School."—Dr. Victor C. Vaughan, Dean, University of Michigan College of Medicine and Surgery, Ann Arbor.

9. Discussion.

[An evening session, open to the public, may be held, in which case the program will be announced later.]

JOINT CONFERENCE ON A MODEL LAW FOR THE REGULATION OF THE PRACTICE OF MEDICINE.

Second Day—Tuesday, March 1.

Morning Session, 10 a. m.:

Dr. A. D. Bevan, chairman Council on Medical Education, presiding.

(A)—Report of the Committee on Organizations of a State Board on Medical Examination and License—W. H. Sawyer, Michigan, Chairman; J. W. McDonald, West Virginia; James T. Greeley, New Hampshire:

(1) Should there be a separate board of medical examiners or should the State Board of Health also have examining and licensing powers?

(2) Should the examining board be single or multiple?

(3) Should the examining board be sectarian or non-sectarian?

(4) Should the examining board be appointed by (a) the governor, (b) the governor on nomination of the state society, (c) the state society?

(5) Should the secretary be a member or an employe of the board?

(6) Should the examining board be a part of the state university, or should it be entirely distinct from all educational institutions?

(B) Report of the Committee on Qualifications of Applicants, Recognition of Medical Colleges, and Standards of Examination—S. D. VanMeter, Colorado, chairman; C. Z. Aud, Kentucky; A. B. Cooke, Tennessee:

(1) What should be the requirements for an application for a license?

(2) Should graduation from a reputable medical college be one of the requirements?

(3) What subjects should an examination for a license include?

(4) Should the examination be entirely written, or written and oral? Should part of the examination be practical and clinical?

(5) Should an examination be required in all cases, or should exceptions be made? If so, what?

(6) Should the examining board have the authority to determine the good standing of colleges; if so, by what standard should such recognition be determined?

(C) Report of the Committee on the Definition of the Practice of Medicine—H. C. Sharp, Indiana, chairman; L. M. Halsey, New Jersey; E. J. McKnight, Connecticut; B. M. Caples, Wisconsin:

(1) Should a specific definition of the practice of medicine be included in the model act?

(2) If so, what is the ideal form of such a definition?

(3) Should limited practice, as midwifery, massage, optometry, etc., be defined and provided for in a model practice act?

(D) Report on standards of preliminary and medical education. What should be incorporated in a model medical practice act?

A. D. Bevan, Chairman, and N. P. Colwell, secretary of the Council on Medical Education, American Medical Association, Illinois.

(E) Report of the Committee on Reciprocity and Registration—G. T. Swarts, Rhode Island, chairman; Charles H. Cook, Massachusetts; Henry D. Holton, Vermont:

(1) What provisions for reciprocity should be included in a model practice act?

(2) Should reciprocity be based on mutual recognition or on a standard adopted by the board of the state from which the applicant comes?

(3) What provisions for the registrations of licentiates should a model law contain?

(4) Should any provisions be made for county registration? If so, before what officer?

(5) How can the registration system of state boards be made more effective and of more practical value?

(F) Report of the Committee on Revocation of License and Penalties—E. Luther Stevens, Iowa, Chairman; B. R. McClellan, Ohio; G. W. Harrison, New Mexico:

(1) Should the state licensing board have power to revoke a license; if so, on what grounds?

(2) Should such revocation by the state board be subject to review of the courts; if so, should this include only a review of the proceedings of the board, or should the review include the questions at issue and the evidence introduced?

(3) Should a model medical practice act impose a penalty for obtaining money from patients through false representation, as well

as for practicing medicine without a license?

(4) What should be the penalty for practicing medicine without a license? Should it be fine, imprisonment, or both?

(5) What should be the penalty for falsely representing one's self to be a legally qualified tions?

(6) Should revocation of license be permanent or temporary?

(7) Should unprofessional conduct or criminal abortion be considered a justifiable cause for a revocation of license?

(8) What other causes should justify revocation of license?

(9) What penalty should be imposed on limited practitioners who exceed their functions?

[Following the presentation and discussion of the above reports a committee of the conference will be appointed to supervise the drafting of a model bill for the regulation of the practice of medicine in accordance with the decisions of the conference.]

Afternoon Session, 2 p. m.:

Dr. C. A. L. Reed, chairman Committee on Medical Legislation, presiding.

1. Call to order.

2. Address—"Some of the Constitutional Aspects of Medical Licensure."—Professor Ernest Freund, Professor of Jurisprudence and Public Law, University of Chicago.

3. Address—"The Value of Uniform State Laws Regulating the Practice of Medicine."—Professor Roscoe Pound, University of Chicago.

4. Address—"Importance to the Public of the Proper Enforcement of Medical License Laws."—Hon. Harry Olson, Chief Justice, Municipal Court, Chicago.

5. Address—"The Attitude of the Medical Profession Regarding Medical Practice Laws."—Dr. Henry B. Favill, Chicago.

6. Adjournment.

MEETING OF THE CONFERENCE OF THE COMMITTEE ON MEDICAL LEGISLATION AND THE NATIONAL LEGISLATION COUNCIL OF THE AMERICAN MEDICAL ASSOCIATION.

Third Day—Wednesday, March 2.

Morning Session, 10 a. m.:

1. Call to order by the chairman.

2. Roll Call.

3. Address of the chairman.

4. Appointment of reference committees.

5. Report of the secretary.

6. Roll call by states.

7. Adjournment.

Afternoon Session, 2 p. m.:

1. Call to order.

2. Reports of Interim Committees.

3. Reports of Reference Committees:

(a) Reference Committee on National Legislation.

(b) Reference Committee on Federal and State Regulation of Public Health.

(c) Reference Committee on Uniform Regulation of the Practice of Medicine.

(d) Reference Committee on Uniform State Laws on Foods and Drugs.

4. Reports of Special Committees:

(a) Report of the Carroll Fund Committee—Major M. W. Ireland, U. S. A., Chairman.

(b) Report of the Committee on Optometry—George W. Gay, Massachusetts, chairman.

(c) Report of the Special Committee on Expert Testimony—L. M. Halsey, New Jersey, chairman.

5. Report of Committee on Conclusions and Plans of Action. (This committee to consist of the chairman of each of the foregoing committees and of the secretary, ex-officio.)

Following the report of the last committee a recess of one hour will be taken to allow the Committee on Conclusions and Plans of Action to formulate its report. Any members of the conference desiring to present special matters to this committee are requested to be present at this committee meeting.

6. Appointment of Interim Committees.

7. Adjournment.

If necessary the conference will be continued on Thursday, March 3.

ABSTRACT OF PROCEEDINGS

OF THE MEDICAL ASSOCIATION OF THE SOUTHWEST, MEETING AT SAN ANTONIO, TEXAS, NOVEMBER 9, 10 AND 11, 1909.

Meeting of Executive Committee, with Drs. Jabez N. Jackson, E. H. Martin, C. W. Fassett, J. D. Griffith and F. H. Clark present. A committee composed of Dr. J. D. Griffith and E. H. Martin was appointed to audit the books of the secretary-treasurer.

2:30 p. m.:

Call to order by Dr. G. H. Moody, chairman Committee on Arrangements.

Address by Hon. Bryan Callahan, mayor of San Antonio.

Address of welcome by Dr. W. B. Russ, San Antonio.

Address for the District Association, Dr. W. A. King.

Address for the Bexar County Society, Dr. T. Y. Hall.

Dr. J. N. Jackson, in the chair, called upon Dr. C. Lester Hall, Kansas City, to respond to the addresses of welcome.

Paper, "The Need of Medical Inspection in the Public Schools," by Dr. F. D. Boyd, chairman of the Section on Diseases of the Eye, Ear, Nose and Throat.

Dr. E. H. Martin in the chair, Section on Surgery.

Paper, "Some Observations on the After-Treatment of Abdominal Section," Dr. Claude Thompson, Muskogee, Okla.

Paper, "Abdominal Operations and After-Care," Dr. C. Howard Hill, Kansas City.

Paper, "The Value of Surgical Celerity," Dr. Charles Blickensderfer, Shawnee, Okla.

The three papers were discussed by Drs. Griffith, Kansas City; Paschal, San Antonio; Keiller, Galveston; Pettus, El Dorado, Ark.; Still, Brownwood, Tex.; J. N. Jackson, Kansas City; C. Lester Hall, Kansas City, and Wolf, San Antonio. Discussion closed by Drs. Thompson, Hill and Blickensderfer.

Paper, "Damage Done the Child by Adenoid Growths," Dr. J. H. Barnes, Enid, Okla.

Discussed by Drs. J. F. Gsell, Wichita; G. W. Maser, Parsons; J. N. Jackson, Kansas City; Boardman, Parsons; E. H. Martin, Hot Springs; Keiller, Galveston, and F. D. Boyd, Fort Worth. Discussion closed by Dr. Barnes.

State delegations selected the following nominating committees:

Oklahoma—D. A. Myers, E. S. Lain, A. W. White, H. C. Todd, C. A. Thompson.

Missouri—C. W. Fassett, R. H. Barnes, William Frick, Robert L. Neff, C. L. Hall.

Arkansas—J. T. Henry, E. H. Martin, J. A. Foltz, C. S. Pettus, A. J. Vance.

Kansas—C. E. Bowers, G. W. Maser, E. W. Boardman, C. C. Nesselrode, S. S. Glascock, Texas—F. D. Boyd, E. H. Carey, M. L. Graves, J. S. Turner.

8:30 p. m., Elks' Hall:

Dr. Joe Becton, Greenville, introduced the president, Dr. J. N. Jackson, who delivered an address on "Membraneous Pericollitis," illustrating the same with pathologic specimen.

8:30 a. m., International Club Room:

Report of the secretary received.

A membership of 491 in good standing was reported.

November 11, 8:30 a. m.:

The Nominating Committee, through the chairman, Dr. S. S. Glasscock, reported the following nominations for officers for the ensuing year, which report was adopted and the officers declared duly elected:

President—Dr. G. H. Moody, San Antonio.

Vice Presidents—Missouri, Howard Hill, Kansas City; Kansas, G. W. Maser, Parsons; Oklahoma, D. A. Myers, Lawton; Arkansas, A. J. Vance, Harrison.

Secretary-Treasurer—F. H. Clark, El Reno, Okla.

Wichita, Kan., was chosen as a meeting place for 1910.

Resolutions of thanks to the citizens of San Antonio and to the press of the city were introduced by Dr. A. L. Blesh, Oklahoma City, and carried.

Drs. E. H. Martin, Hot Springs, Ark., J. D. Griffith and S. S. Glasscock, Kansas City, were appointed to visit the next annual meetings of the state medical associations of Louisiana and Colorado and invite those states to affiliate with the Medical Association of the Southwest.

Dr. J. A. Foltz, Fort Smith, Ark., introduced the following resolution:

“Resolved, That it is the sense of the Executive Committee of the Medical Association of the Southwest to frown down upon and to do all in its power to prevent the publication of the scientific papers of the association in journals which advertise flagrant nostrums, which make claims so as to be a disgrace to our profession, if in any way we should associate with them or countenance them.”

The resolution was discussed and adopted. The meeting adjourned.

News Items.

The Physicians' and Surgeons' Hospital and College Company have sold their hospital to Dr. E. Meek, one of Little Rock's oldest and best known physicians. Dr. Meek will assume active charge of the hospital on March 1, and give it his entire attention. It will be open to all reputable physicians. The College of Physicians and Surgeons retain a lease on the lecture halls for a period of ten years, and also reserved all the west half of the grounds, including the laboratory and anatomical buildings.

The First District Medical Society will be held at Walnut Ridge, March 8, 1910.

Beginning with the January, 1910, issue, the old-established Medical Review of Reviews will be edited by Dr. William J. Robinson, editor and founder of the famous Critic and Guide, Therapeutic Medicine, and the American Journal of Urology.

The editorial offices of the Medical Review of Reviews have been removed to 12 Mount Morris Park West, New York City.

The scope of the journal will be enlarged and every department will be strengthened. The subscription price remains the same.

The following Arkansas doctors are taking a postgraduate course at the New Orleans Polyclinic: Dr. J. C. Walker, Emerson; Dr. H. A. Morrison, Lacey; Dr. J. B. Stueart, Black Springs; Dr. R. F. Johnson, De Queen; Dr. W. J. Pitman, Greenwood; Dr. G. P. Sanders, Magnolia.

Personals.

Dr. T. J. Stout, of Brinkley, and Dr. J. A. Bogart, of Forrest City, are at the Polyclinic in New York. They will return home about April 1.

W. W. G. Thompson, of Hermitage, Ark., has removed to Shawnee, Okla.

Dr. H. H. Neihuss, of Wesson, spent a few days in the city recently.

Dr. A. H. McKenzie, of Dardanelle, secretary of the Yell County Medical Society, was in the city a few days during the past week.

President Lenow, of the State Medical Society, has appointed Drs. William Crutcher, of Pine Bluff; William R. Bathurst, of Little Rock, and L. J. Kosminsky, of Texarkana, as delegates to the coming convention to be held in Washington City, May 10, for the revision of the Pharmacopeia.

Dr. John Fewkes, of Hot Springs, spent the day in the city during the early part of the month.

Dr. George S. Brown, of Conway, president of the State Board of Examiners of the Arkansas Medical Society, was in the city a few hours on the 16th.

Dr. Hays, of Russellville, spent several days in the city during the first part of the month.

Dr. G. D. Huddleston, of Lamar, was in the city on the 8th, professionally.

County Societies.

BENTON COUNTY.—The Benton County Medical Society met at Gentry in called session, December 21, 1909. The following officers were elected for the ensuing year: E. E. Pickens, Rogers, president; J. T. Clegg, Siloam Springs, vice president; J. A. Fergus, Rogers, secretary-treasurer; M. W. Duncan, Center-ton, censor for three years; C. A. Rice, Gentry, delegate for two years; J. T. Clegg, Siloam Springs, alternate.

J. H. BEARD, *Secretary.*

MISSISSIPPI COUNTY.—The Mississippi County Medical Society will not meet this month (February). The next meeting will be held at Blytheville, March 8, for the election of officers.

O. HOWTON, *Secretary.*

JEFFERSON COUNTY.—The Jefferson County Medical Society met in regular session at the office of Dr. W. S. Stewart, with the following members present: Drs. Woodul, Hankinson, Williams, John, Scales, Jordan, Stewart, Glover, Jenkins and Breathwitt. The Board of Censors made a report, which was adopted, and Dr. A. G. Thompson was notified to be present at the next meeting, which was set for one week from date.

WM. BREATHWITT, *Acting Secretary.*

Later.—An adjourned meeting of Jefferson County Medical Society was held at the office of Dr. W. S. Stewart, with the following members present: Drs. Blackwell, Blankenship, Breathwitt, Brunson, Clark, Crutcher, Jenkins, John, Hankinson, Luck, Thompson, Stewart and Woodul. The object of the meeting was to do as seemed best with the report of the Board of Censors, made at the previous meeting. Dr. A. G. Thompson said that he had been doing contract practice for the Sawyer & Austin Lumber Company for nine years; that in his contract he furnished medical attendance to the employees and their families; that before he accepted the contract he went to members of the medical profession of Pine Bluff, and accepted the contract with their consent; that he now realized that there are some features of the contract that are unjust to the other members of the profession here, and that he had already taken the matter up with the company, and, further, that he would do all in his power at once to get a

contract with the company that would be agreeable to both the company and the profession of Pine Bluff. After some discussion the society adjourned without taking any decided action.

W. S. STEWART, *Acting Secretary.*

SEVIER COUNTY.—At a meeting of the Sevier County Medical Society, at Lockesburg, December 7, 1909, the following officers were elected for the ensuing year: W. E. Hopson, Lockesburg, president; C. E. Kitchens, De Queen, vice president; C. A. Archer, De Queen, secretary.

C. A. ARCHER, *Secretary.*

DALLAS COUNTY.—At a recent meeting of the Dallas County Medical Society I was elected secretary to fill the vacancy occasioned by the removal of the former secretary, Dr. T. L. Rives, from this place to Missouri. Some interest is being manifested, and the meetings are fairly well attended. The following is a list of our membership: Drs. C. J. March, F. E. Harrison, O. R. Kelley, W. L. Worthington, H. H. Atkinson, O. O. Wozencraft, R. O. Wozencraft, Lewis Wozencraft, J. H. McDonald, J. Y. Smith, M. D. Kelly. We hope to show up in good form at the coming state meeting, and I shall urge a good attendance.

H. H. ATKINSON, *Secretary.*

Book Reviews.

A Text-Book of Protozoology.—By Gary N. Calkins, Ph. D., professor of protozoology in Columbia University, New York. Octavo, 349 pages, with 125 engravings and four colored plates. Cloth, \$3.25, net. Lea & Febiger, Philadelphia and New York, 1909.

Probably the most interesting problems confronting the medical profession are to be solved by a study of protozoology. In our ardor to study the vegetable organisms we have, until very recently, overlooked the fact that the lower animal organisms are to be equally considered as factors in the study of diseases. Even the discovery of the malarial parasite by Laveran failed to give proper impetus to this study. Recently this science has been rapidly advancing, and we now recognize the fact that many of our commoner diseases are caused by the one-celled animal parasite.

This work intends to give a good outline of the whole field of protozoology, except the laboratory technic. It describes quite fully the classification, living conditions, morphology,

physiology and pathology. The chapter on physiology is well worth the while of any practitioner for the light it throws on physiology in general. The whole work is of great value to any practitioner who cares to keep up to date, and should form as much a part of his working library as a work on bacteriology. Especially is this true for Southern physicians as many of these diseases are more common in the South.

The Practitioners' Visiting List for 1910.—An invaluable pocket-sized book, containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain thirty-two pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

Being in its twenty-sixth year of issue, it embodies the results of long experience and study devoted to its development and perfection.

Obstetrics.—A Manual for Students and Practitioners. By David J. Evans, M. D., Lecturer on Obstetrics in McGill University, Montreal; Fellow of the Obstetrical Society of London. New (second) edition, enlarged and thoroughly revised. 12mo, 440 pages, with 169 illustrations. Cloth, \$2.25, net. Lea & Febiger, Philadelphia and New York, 1909.

This little work now running its second edition is concise and complete.

So much has been written on the subject of obstetrics that any work that lives and thrives thereby proves its worth.

In this edition the sections dealing with the implantation of the ovum, the development of the placenta, and toxemia have been entirely rewritten.

The revision has excluded those things which have been discarded by progress and includes the latest developments.

Thornton's Pocket Medical Formulary. New (ninth) edition. Containing about 2,000 prescriptions, with indications for their use. In one leather-bound volume. Price, \$1.50 net. Lea & Febiger, publishers, Philadelphia and New York.

There is nothing much to be said about this book, when we take into consideration that this is its ninth edition. It certainly must have its place on the desk of a great many physicians. The diseases are arranged al-

phabetically, and the indications for choice between the various formulæ, according to the conditions to be met, make it useful to the busy physician.

The Physician's Pocket Account Book. J. J. Taylor, M. D. Bound in full leather. Twenty-four pages of practical instructions for physicians; 216 pages of accounts. Price, \$1.00 per copy. Published by the Medical Council, 4105 Walnut Street, Philadelphia, Pa.

This book is a complete and at the same time simple and thoroughly efficient account book. It contains twenty-four pages of business instructions for physicians, which should be found very useful. The book contains 216 pages for accounts, of which eight pages are devoted to alphabetic index, 146 pages are devoted to regular accounts, thirty-two pages to short accounts, twenty-four pages to cash accounts, and eight pages to birth, death and vaccination records.

The Principles of Bacteriology.—A Practical Manual for Students and Physicians. By A. C. Abbott, M. D., Professor of Hygiene, University of Pennsylvania. New (eighth) edition, thoroughly revised. 12mo, 631 pages, with 100 illustrations, 26 in colors. Cloth, \$2.75, net. Lea & Febiger, Philadelphia and New York, 1909.

This work has now reached its eighth edition, which speaks for itself. It is a book for the student and practitioner of medicine. It presumes that the reader is unfamiliar with bacteriology.

The article on infection and immunity has been practically rewritten, and stress has been laid upon the newer views of phagocytosis.

A great deal that appeared in former editions has been eliminated.

Minor and Operative Surgery, Including Bandaging.—By Henry R. Wharton, M. D., Professor of Clinical Surgery in the Woman's Medical College, Philadelphia. New (seventh) edition, enlarged and thoroughly revised. 12mo, 674 pages, with 555 illustrations. Cloth, \$3.00, net. Lea & Febiger, Philadelphia and New York, 1909.

This manual has now reached its seventh edition, and by so doing may be fairly considered established as a standard.

A large amount of new material has been added, and a number of new illustrations. Some new minor surgical procedures have been incorporated, and new operations described.

It is a work well adapted to the requirements of the student and practitioner.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Soliman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
 Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.
 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-1910.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathwitt, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES, 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.
 Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, president, Lockesburg.
 Fifth District—George S. Brown, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarrroll	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunningham	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	I. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Osceola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Quachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
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Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
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White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

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In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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Original Articles.

UREMIA, WITH REPORT OF A CASE.*

J. A. Moore, M. D., Lisbon.

The soldier has our admiration for his bravery; his heroic deeds which are recorded, that we read about with pleasure and enthusiasm, arouse our patriotism. But his bravery and heroic acts fade into insignificance compared to the bravery of the pregnant woman during a dangerous labor. I know all doctors understand my meaning.

I have seen but few deaths result from pregnancy, and I pray that I may never see another. The most dangerous condition is uremic poison, which, like a thief at night, slips upon its victim, giving no warning, and which the doctor many times does not see until she is in a moribund condition. It is most dangerous and disastrous in its working, and demands the most careful consideration.

While there is a difference of opinion concerning the etiology of eclampsia, Frerichs pointed out, in 1851, the close resemblance between the convulsions occurring in pregnancy and the uremic convulsions of Bright's disease. After reviewing the evidence with scientific precaution, he concluded that true eclampsia occurs only in pregnant women suffering with Bright's disease.

Braun, in the same year, and Wieger, in 1854, brought effective support by publication of a great number of observations confirmatory, both in respect to the clinical features and the postmortem appearances of the uremic origin of puerperal convulsions. Since that time much has been written and many theories advanced. Personally, I am of the

opinion that true eclampsia does occur in women who are not suffering with Bright's disease.

It is true we see a great many cases of convulsions of neurotic origin, which are of little concern relative to life, and many times we will arrive to patients who have had several convulsions with marked ill effect, and they go on with labor in a natural way without further trouble.

I have treated fifteen or twenty cases of puerperal convulsions, and the most of them I think were true eclampsia, and only two of that number had Bright's disease.

Uremia, however, places another phase to the condition of the case, being exceedingly serious. As to its cause there are reasons for believing that a number of causes may be operative in the production of the condition. The various symptoms may occur singly or in groups, and may develop suddenly or slowly. The greater number of them are evidently due to cerebral disturbances, though as a rule no corresponding anatomical lesions are found, and recently it has been asserted that these varied symptoms do not all arise from a common cause. The decisions of the questions, however, are difficult, as the same poison may act quite differently upon the different individuals, owing to variations in the susceptibility of different persons.

The symptoms are undoubtedly produced by some sort of an intoxication, and our first supposition would naturally be that this intoxication is due to retention of substances in the body that should be normally excreted by the kidneys and bowels.

In spite of any theories advanced, we know that eclampsia, which is independent of nervousness, as I formerly mentioned, is a grave condition, and is the dread of pregnancy. For the reason of its frequency, we should begin to watch the pregnant woman from the time

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

we are employed to be with her, and we fail to perform our duty in not impressing upon the mind of the husband the importance of closely observing her throughout her pregnancy, and the necessity of carefully watching her kidneys, and at the very least we should visit her once a month. With our knowledge of sepsis only in extraordinary cases, there is no excuse for the one dread of the pregnant woman, and that one factor is practically eliminated. We must admit the kidney is the principal source of danger, and that it should be watched.

The case I wish to report will demonstrate more forcibly the point I wish to make. I was called in consultation by Dr. Irby, of Shula, to see Mrs. McClesky Multip, age twenty-eight, previous births normal, previous health very good. Dr. Irby was called to see her forty-eight hours before, finding her suffering with pain in head and neck; some pain in back; was able to answer all questions. Temperature normal, pulse full and a little fast; her kidneys acting scantily and bowels sluggish; feet swollen; in a pregnant condition of about eight and one-half months, according to her statement.

He gave her calomel purge and bromides as a sedative. He returned to see her next day and found her better; bowels and kidneys had acted fairly well. She was able to sit up when he left, but still complained of some pain in head. Next morning about 4:00 o'clock he was called back and found her suffering a great deal with pain in head and one side of neck and shoulder. Temperature, 100.5; pulse fast and hard; breathing fast and very hard. I was called about 7:00 o'clock same morning, and arrived there about 9:00 o'clock. I found her in a semi-delirious condition, saying her head and neck were killing her. Pulse, 120 and strong; temperature, 102; breathing, 35 and very hard; eyesight negative, as Dr. Irby had been giving morphia. Kidneys acting, but involuntary. I suggested we give her calomel, salol, veratrum and push bromides and morphin to effect for pain. About 11:30 went to give her a dose of medicine and she had a convulsion. I made a digital examination; found os dilated to size of a dollar or more. I suggested we deliver the fetus at once. I made preparations, and by 12:30 I had delivered her of a living child. We then pushed the treatment with the addition of hot packs to produce diaphoresis.

Coming from under chloroform, she was still delirious and continued so. Pulse was

good, beating about seventy-five or eighty to the minute; breathing fast and hard.

We gave her a bottle of oil about 4:30, which had effect in a short while. She continued to grow worse until 11:00 o'clock that night, when she died.

As I have said before, I have treated a good many cases of puerperal convulsions, and can say that this was the first I ever had the misfortune of seeing die from this trouble.

Now, if this woman had been watched throughout her pregnancy, from the beginning, I doubt that this condition would have occurred. I feel that this will ever be with me in my obstetrical work, and if there was ever any doubt in my mind that precautions I suggest were not necessary, it has been fully removed, and beyond the peradventure of a doubt tells me my duty in constantly watching for such conditions.

DISCUSSION.

Dr. Ragan (La.)—I think the doctor's idea of the pathology of this condition is correct. We claim it is toxemia, and not nephritis. The liver suffers really more than the kidneys do with the toxemias. It may be that the kidneys will recover completely if the patient survives.

As these cases are mainly seen by the general practitioner, I think something of the medical treatment may be noticed for a moment. It is not rational to give such a remedy as calomel in these cases, because it is one of the agents for promoting waste, and if the kidneys have balked at removing the poison already circulating in the blood, I do not think it wise to throw a greater load on them. Elimination should be promoted by the lungs, skin and bowels by agents that will act on those organs. Diaphoresis should be promoted by heat and use should be made of other ways of elimination. You can, I think, gain more by arresting metabolism for the time being with a dose of morphin, which would allow the kidneys to help remove the poison already present in the blood; then, later on, further elimination might be carried out in the usual way. Since the fetus is the exciting cause, after all, the removal of the fetus is the real treatment. I think in the future, when more women are confined in hospitals and sanitariums than at present, the treatment will be more generally operative, instead of by the slower methods of dilating the cervix and doing a version or a high forceps operation. I think the operation of choice

will be a vaginal cesarean section. This operation would require but a few minutes, and would be less shock to the mother in every way. It occurs to me that it would be the operation of choice if the delivery is to be effected very promptly.

Dr. Snodgrass—I do not wish to add anything to the pathology of this disease, which has been thoroughly studied and seems well understood. I would like to bring out one or two points in the treatment from which I believe I have derived some benefit. I would like for some of you to try them; I think you will find them practical. Of course, prophylactic treatment is of the utmost importance, and should be carried out long before labor begins. But when you are called for the first time and find the patient unconscious and in convulsions, unable to swallow medicine, something must be done. I don't think it best to hurry delivery in this condition, and some good authorities agree with me. I have recently been called to two such cases as this. My treatment has been to give 15 m Tr. veratrum hypodermically to lower the arterial tension. I don't care to appear as a "salts doctor," but this is one condition where I am a firm believer in salts. I give from four to six ounces of epsom salts, dissolved in one pint of hot water, 120 degrees F. I administer the salts solution by the use of a soft rubber catheter, attached to a funnel or fountain syringe introduced into the nose, just as nasal feeding is practiced on insane persons. It is easy, safe and painless.

When this hot epsom salts solution is introduced into the stomach you will get a copious action from the bowels in from twenty to thirty minutes. You will have complete muscular relaxation. Then is the time to deliver the child, instrumentally. I have succeeded in saving both mother and child by this plan of management.

I would not advise anyone to try the vaginal cesarean section in such a desperate case. I think the surgeon deserves a certain amount of protection, and I believe we ought to be able to protect ourselves. If you operate upon the patient and she dies in that condition someone will accuse you of killing her. It is your duty to protect yourself as well as try to save the patient's life. If the chances are about equal for her to get well without operative interference, let things run on for a few hours. It would be an act of wisdom upon the part of the surgeon to look out for his own interests.

Dr. Warren—I wish to make this statement relative to Bright's disease and toxemia: I don't believe that Bright's disease, if properly looked after—a chronic condition that has been existing for years—will at all interfere with a woman bearing children. My experience has borne me out in this statement. It is in the acute cases in which the toxemia comes on during pregnancy.

Recently I had a case in point—a lady from Helena. She was confined March 31. Doctors in Helena had advised premature delivery. The woman had general anasarca, and albumin in the urine to throw at the birds. I never saw anything like it before. Her bowels were loose. Of course it was thought to be acute. The woman had come to her parents for care and treatment. Operation had been advised. I said, "No, she cannot take the anesthetic." I began treating her generally and found out that her father before her had been a sufferer from Bright's disease for years and years. I got the anasarca reduced and she went on to full term and was delivered with uneventful labor on March 31, as above stated. I had another case with a similar experience.

I don't believe that chronic Bright's disease plays any part in eclampsia, but it is a toxemia, and the nephritis comes on probably as a result of the toxemia. I asked Dr. Morris to come up here and tell us his experience in these cases. I believe he has had good results; but he said he could not talk.

I have never seen a case die, nor have I had to resort to the cesarean section to get a woman to live. I have seen them when we *thought* they were going to die, but they finally pulled through. I believe we ought to differentiate between chronic Bright's disease and acute trouble brought on during gestation.

Dr. Meek—I have seen two or three cases where the albumin persisted in spite of treatment after the pregnancy was over, but these terminated fatally.

I think we ought to differentiate between chronic Bright's disease (intestinal nephritis) and the condition occurring during pregnancy, which gives rise to dyspnea, albumin in urine and edema. Of course, if the patient has nephritis, either acute or chronic, and to this is added pregnancy, then the elimination power is diminished, and we almost certainly have eclampsia.

Toxemic pregnancy is something that we have just recently begun to study. There is a toxemic condition; but if you had a crip-

pled kidney there and then the toxemia of pregnancy set in. It seems to me you will certainly have a dangerous toxemia because of that chronic nephritis. I have treated a good many; only a few cases have I seen die. I have seen three that I knew died; but whether they had chronic nephritis before, I do not know. I have always used morphin hypodermically in these cases, to control the convulsions, and I think some of my confreres always use it in the same way. You may say this is very dangerous, which I admit, but I have never had any bad results from it.

Dr. Dunaway—Since the pathology of this trying condition is not clearly understood, and there is more or less speculation concerning it, and every man has the right to promulgate his own theory on the subject, I suppose I may be permitted to make a suggestion along that line. I have always felt, or believed, of course, that the convulsions were produced by the retention of effete matter, excrementitious in its nature, or else any lesion that leads up to that condition. There is a time in the course of pregnancy when there is some irritation or reflex condition of that kidney that interferes with its physiological functions and makes its physiology pathological. In other words, we find albumin in the urine, but it is not considered to be Bright's disease. There is albuminuria. Now, let us go back. I think we will find that sometimes simply the condition of pregnancy itself has produced this irritation in the kidney and rendered it pathologic, because we know that the pelvic nerve mechanism is very intimately associated with that of the kidney—with the suprarenal capsule. The vasomotor apparatus of the ovary, of the uterus and the uterine adnexia are very intimately associated with the renal plexus. So intimately associated are they that they stand with their hands clasped together, as it were. In order to make myself clear and be brief, I will say that this irritation is the product of pregnancy itself; so the irritation, with the reflex therefrom, spends itself upon the renal ganglia and renders its physiology abnormal, and from day to day the system of the patient is blockaded with this effete material, because of the failure of proper elimination, and the time comes when the last straw is laid upon the camel's back and there is a convulsion.

Dr. Smith—I think the thanks of this society should be tendered to Dr. Moore for bringing this subject before this meeting. I

think most of the members present have listened with the greatest interest during the reading of his paper. I appreciate that prophylaxis is above all other measures, and should be observed absolutely and practiced faithfully in this condition. It is true that occasionally, under the very best treatment, preventive and prophylactic, this condition occurs. It occurs in the primagravida in a large percentage of cases. It perhaps is due more to the carelessness or inattention of the doctor than any other condition. It is rare that we find it in the multipara. It should be the practice or rule of every doctor to make stated examinations of these primipara cases. Prophylactic treatment is purely didactic and hygienic. It is rarely that drugs are indicated. If the patient, after the first few months of pregnancy, be properly instructed as to what is likely to occur, certain symptoms that may be probable, I think that we can in nearly every instance prevent this condition. The question of the cause of this condition is not yet settled. It is true that we have albumin almost always in the urine, but it is not settled by any means that this condition is due to the convulsions. Dr. Whitridge Williams has perhaps written the best treatise on this subject. He seems to think, as do most of the authorities, that it is due to the failure of final destructive metabolism of the proteid products, catabolism of the foodstuffs, especially the retention of certain anemic compounds.

Now, until we are able to make proper distinction between these two points or compounds, and make the proper classification of these cases—where we have albumin in abundance with convulsions, where we have albumin in small quantity with convulsions, and where we have convulsions without albumin, as has been reported—it is almost impossible for us to say just what the causation is.

However, I feel justified in making this statement: If we will keep our patients under surveillance clear through their period of gestation, especially the primipara, I believe these cases will occur very rarely.

The prophylactic treatment is purely didactic—the introduction of certain special proteid foods, albumin, albuminoids and proteids, the encouragement of exercise, out of doors and indoors, fresh air and attention to all the eliminative organs, the kidneys, the skin, the lungs and the bowels. If we will keep in mind these four organs, the functions they

are to perform and the knowledge of didactics and what it means to be overfed or improperly fed, it will be the rarest instance that we shall be called to administer medically or surgically in these cases. When they do occur, it may be medical or it may be surgical, or combined.

Dr. Rhine—As Dr. Smith has said, we must keep them from having these eclamptic spasms by prophylactic treatment.

I recollect a case in which all the prophylactic measures had been used on a special friend of mine, who lived next door; had a short, easy labor. After labor was over and everything seemed to be all right she had an eclamptic fit. This lady had the best prophylactic treatment that I knew; therefore I am constrained to believe that you cannot keep all of them from having it.

Dr. Moore—Many of us practice in the country. Not all of us live in the city, where we can see our patients whenever we want to. Most of my practice is in the country. Very often I am called to a case where I did not know the lady was in a pregnant condition until I got the call. When I get there I find the convulsions upon her. Of course, in such cases as that we have to treat them the best we can. We make delivery as soon as possible; that is my idea. If I go to a lady and she is having convulsions the first thing I do is to make preparation. If I am not close enough to get another doctor to assist me I do the work myself. I go ahead and make the preparation; put her under the influence of an anesthetic, and turn that over to her husband or some other person in the room with me, and deliver the child as soon as possible. I have had several cases where convulsions occurred after delivery, but in most of them the convulsions will cease as soon as delivery is effected.

I call to mind one case that I delivered. She had a very easy labor—it lasted only a few minutes, and was over soon after I got there. I rode about three miles to get to her. There was no trouble, apparently. Within the next twenty-four hours after that time she had a convulsion. I went to see her, and she had several before I could get them stopped. I don't know the cause, but it was intoxication of some kind.

We men who practice in the country have got to do the best we can and make the best of things as we find them. We cannot prevent all these cases, but we have to treat them as we see them.

EDUCATION OF THE LAITY.*

John S. Jenkins, M. D., Pine Bluff.

It may be a presumption on my part to try to offer you a solution to some of the drawbacks of the medical profession, especially to make the statement to a gathering representing as it does the better element of the profession of my state.

That the fault and solution of it can be rightfully placed at our own doors, as the direct result of negligence, lack of courage and independence of thought and speech, in place of standing up as a profession and demanding our rights (which we are compelled to gain by study, passing state boards and becoming licensed physicians); in place of teaching the laity of what those rights consist, and what value the medical profession can be to them, to their offspring, and to society at large, we cater to the unjust demands of the ignorance we allow to exist. In short, the solution I offer you is no more than for the profession as a whole to stand out and do their duty—first, to the medical profession; second, to our individual selves, and third, to society and the public at large. By educating the public so that they, by that education, will learn what the medical profession is and what it stands for, they will then be able to distinguish between the educated, painstaking physician, with honest convictions, plain statements and courage enough to make them, and the “fourflushing” know-alls, who, from a knowledge of their own weakness and inability, take advantage and play with the ignorance we, as a profession, have allowed to exist, depending more on the ability to be nice and please people's ignorance than the preparation and ability to practice medicine. You will all acknowledge that the practice of medicine does not consist of doing what people want done and being nice, but in doing what your knowledge of morbid and pathological conditions indicates should be done. Yet many in our own ranks are belittling not only themselves, but the profession to which they belong and owe their support and loyalty, by catering to the demands of ignorance and allowing it to exist, with no effort on our part to correct it.

If we boldly come out, cease catering to

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

the ignorant demands made upon us, and also teach the layman to call the bluff made by the fake swindlers and grandstanders, both in and out of the regulars, they will soon learn that all such men hold is a four-flush, never a winner, if called. Let us consider and see what we, as a profession, have done to merit the confidence, respect and protection of the layman, but allowed them to be preyed upon by the vultures who feed on and reap rich harvest by playing with the ignorance we have allowed to exist. From the remotest period of antiquity to the present day our profession, with its store of useful knowledge (not used) has been kept from laymen, shrouded in a cloak of mystery, superstition and false modesty, or only used by the fake and swindler in a false way, with false and untrue statements of conditions and the things people should know, but do not, or what little they do know is gathered from the most illiterate and vilest channels, in place of from true and clean ones. Yet there are those calling themselves doctors daily playing with ignorance in place of instructing it. Laugh at the medical profession as a body and the unenlightened laymen join in the laugh, because, while we have unearthed the evil existing, know where it is as individuals, each one is seeking his own selfish gain at the present time.

Never stopping to think or realize that by elevating the profession of medicine as a whole he is strengthening himself, and the reward will, by so doing, more than double itself, yet we are standing still and failing to do our part to correct the evils existing. And the world goes on in blissful ignorance of the dangers daily threatening their lives, the lives and health of their children, and costing each community incalculable expense which they know not of. Discoveries are being made daily by the scientist. We thank them for the generosity with which they give these valued facts, "proven by them" to us. But what is needed at present is a way to put this knowledge, known to us, into use, not for selfish financial gain, but for the up-building of mankind, and by so doing elevate and strengthen the profession of medicine until we stand where we belong, and where an educated public will place us—dictators of public health, and not servants to the demands of ignorance. Each step in the etiology of disease and its prevention adds strength to prophylaxis. But an uneducated public does not grasp these facts and realize

that public health and fearless, educated physicians to direct and guard it against the inroads of these now hidden enemies of theirs means their protection, their welfare, the purity of their homes, the health of their families, decreased expense with proportional increased income.

We have lawyers, clergymen, statesmen, teachers and the press—men educated and enlightened on every subject of public interest and welfare, yet grossly ignorant on the one subject of most importance and interest to society at large than all others combined—their health and the protection of the generations yet to come from ignorance and its results. The fault is ours, not theirs. We have catered to the demands of ignorance, bent and swayed by it, without the courage to even attempt to correct it; stood in fear to mention subjects that would perhaps make a few enemies or perhaps lose some practice for the time being. We, who should be dictators, fear society, and in our misconception of human nature think that society would not need our services, never stopping to realize that once they recognize the value of the medical profession to them our services would not only be demanded and sought for, but the fakers, swindlers, cure-alls, and the like, would never even be thought of. On the other hand, at present society fears us and dreads to have her corruptness and immorality exposed. There we stand, and have stood for ages, because the profession of medicine have neglected to do their duty to themselves and to society by failing to instruct those who are teachers the importance and value of these things, and by so doing impress them in a correct and truthful way of the value and importance of the medical profession to society at large. Many of us use up much valuable time in trying to impress the ignorant layman of our individual importance and the other doctor's unimportance, never telling them of the value to them of the profession as a whole. We can never expect society to take cognizance of our value to them when each of us undervalues the other. All fail to educate society and do our duty to them by opening their eyes to these hidden enemies of theirs, known and recognized by us. So far we have put "the cart before the horse," grumbled and complained that legislation and the laity do not protect us and our interests. Do we protect theirs? Have we, as a profession, ever done anything to demonstrate to

the laity that we deserve their protection, when we have allowed and are allowing these things, hidden from them, known and recognized by us, to prey upon them, their children and their children's children, without their knowledge? Has the profession ever demonstrated to the public, not by statements made as individuals, but through instruction in the proper channels, that our advice and teaching can be of untold value to them? We sat idle, complained of our lot, allowed quacks and charlatans to, in their way, mention these things and prey on the ignorance we allow to exist, and, seeing their success, many of us have adopted their methods, and are daily playing with ignorance. As Cleveland has well said, "There is no civilized country today in which the standard of conduct is so low as with us. The cause is not to be found in any inherent tendency to immorality or dishonesty, but in the fact that individuality is fast waning among us. The average American is not controlled in his actions and speech by principles that grow out of his own conception of right and wrong, but his code of ethics, consciously or otherwise, is adopted from those about him."

So it is with us. We, who should dictate as to matters pertaining to the regulation of society and social custom, so far as they pertain to public health and public protection. We allow custom and ignorance to dictate to us. We have sent doctors to the legislature and tried to elect officers to do our bidding. We know that the laws would be good ones and a benefit to mankind. But, unfortunately, mankind cannot be driven to medical laws any more than the clergy can hope to legislate people into heaven. They must be taught to think and act for themselves as individuals, and know why and for what reasons we wish these laws passed. They will then make the laws of self-protection, and in those laws there cannot help but be protection for the better element of the medical profession. We try to go too fast by trying to force laws on mankind without educating and preparing their minds to comprehend and appreciate the value and importance of such laws.

When this is done that first and strongest law of nature, self-protection, will be exemplified. They (the people), from the true knowledge, not false, which our education through the proper channels has given them, knowing why, and for what reasons these

things should be, will make the laws to protect and pay the profession, which they recognize as of inestimable value to them, to their children, to their family and the public at large. Ministers well informed on almost all subjects of public interest and welfare spend Sunday after Sunday—time, thought and energy—on a sermon, then tell people what they already know. Years have been spent in the churches trying to teach the people of the small sins they know of, never enlightening them upon the greater sins which they know not of. Our ministry would send a soul to hell for drinking, gambling, and the like, and yet remain silent if some man or woman in his own congregation had murdered an innocent child by bringing it into the world to die of tuberculosis, or infected by the social evil. There is harm in the small sins; the church, the women of the land, will all lend their aid in trying to eradicate such evils. But no harm or sin is committed for a tubercular to marry and bring into this world an innocent child to suffer with the increased expense incident to its care and maintenance. No sin is committed when an uncured social evil carries his infection to an innocent woman, and through ignorance makes her an innocent partner to his crime of murder of the innocent or renders her life a burden, she an object for the operating table.

It is not the shortcomings of the profession that are holding us back, but negligence and timidity of entering new fields. We have catered to custom so long that we scarcely know how to begin to set ourselves right and make custom cater to us, so far as it pertains to health. But as a profession we owe it to humanity and to ourselves to teach those who are teachers these things which we know, set them right with a proper conception of what we owe society and what society owes us. The ministry, I am sure, want to do good; they mean well, but we have allowed them to remain ignorant of the things that they should know and lend their aid in eradicating. When so many children were dying in New York, due to the contaminated milk supply, and knowledge was brought to the press, war was waged against it; the press has ever stood by the doctors. They will do so now if we will but teach them. The fault is ours, not theirs. Again, many educated people, well informed on almost every subject, admire the fourflusher who does not have to examine a patient, but

knows so much he can at a glance make a diagnosis. They do not appreciate the fact that correct diagnosis is and can only be made by painstaking care, perhaps laboratory work, often only by exclusion of other things. And they, in their ignorance, wonder why Dr. M. can't tell at a glance what the trouble is, when all Dr. G. has to do is look at the tongue and feel the pulse, or not that much, and knows all about the trouble. They wonder why Dr. M. don't go back to school and learn as much as Dr. G. must know to be so wise. Is Dr. G. any more than a fourflusher? Is he in any way above the quack and advertiser whom he condemns? Is he not a fourflusher playing on an ignorant mind? Could he win if his hand was called? Yet Dr. G. can make a visit, look at the tongue, feel the pulse, and consume the other portion of his time impressing the family with his knowledge and importance, charging not a regular rate for the visit, but meets the competition of the other doctor with a smaller charge, and if they pay cash takes 10 per cent off of that, and with ignorance along these lines, if Dr. M. makes a painstaking diagnosis, charging perhaps \$5.00 extra for laboratory work to enable him to more closely reach the true condition of affairs, one of two things will happen. He may get word that the family has sent for the fourflusher, who can tell them right away all about the case, and they will not need him any more, or, when his bill is presented, a bill for thorough work, he will be accused of being a robber, when in reality who is the thief—the man who makes his by a grandstand play on an ignorant mind, or the man who charges a full amount for an honest effort to reach the true condition of affairs? And, were an ignorant public educated by the better element of the profession to call these bluffs made by the fourflusher, whose services would they demand and pay for—the quacks, swindlers, medical fakes and advertisers, who are living on an ignorant public, which the medical profession have failed to educate? It is hard to say, but many of us are attempting to fight this element with the methods employed by them, when, if we fight dishonesty with truth, truth would win.

It seems to be a case of "get the beam out of your own eye before attempting to remove it out of the other fellow's." Cannot the regular profession begin to realize that the swindlers and fakes will ever play upon an ignorant public, which we have

neglected to educate to the proper conception and appreciation of the true physician? Is it fear that an educated laity will retire many of us, and demand better, that makes us hesitate to teach them? I hope not. But who are the people who, when sick, look for the hospital, its thoroughness, its detail, thorough, painstaking diagnosis? It is those who have been there and know. Who are our easiest patrons to handle? Is it not those who have been in a hospital or those who have been under the care of the doctor who depends on his results, and commands people to do things? Yet we sit idle and blame the people for doing the very thing we would do, did we not know better. How many of our public officers know that annually tuberculosis kills one-seventh of the people who die? With its increased expense and decreased income incident to their care, how many students of social and political economy have ever considered the cost of tuberculosis? It is estimated that a man's earning power is averaged at \$600.00 a year, and the average cost of living \$600.00 a year. Add what his earning power would be to the cost of his maintenance, which will give us \$1,200.00. Multiply \$1,200.00 yearly by the number of tuberculars in your city, and think. The Civil war was one of the deadliest in the history of the world. Yet in the United States, from 1904 to 1907, tuberculosis claimed three times as many victims as died during the four years of that war. One-third of all deaths between the ages of twenty and forty-five are caused by tuberculosis. It is estimated that the cost of this one disease to the state of New York is \$160,000,000.00 yearly. Last year tuberculosis claimed 160,000 in the United States. Yellow fever, which we all dread, even the grand juries, judges and prosecuting attorneys who refuse to prosecute the medical fakes and swindlers. They and the state legislature will spend money to prevent yellow fever entering the state, yet in 115 years in the United States it claimed 100,000—60,000 short of what tuberculosis claims in one year. And were they not ignorant on this subject we and the people might criticize them, and exclaim, "Consistency, thou art a jewel." But as it now stands, it is the medical profession, not the people and those whom they have chosen to represent them and their interests, that are to be criticized. At present we have no paid board of health, when such a board, free from political graft and headed by doc-

tors who have professional honor and public welfare before financial gain, could begin to save the state in actual money \$1,200.00, multiplied by the number of tuberculars in the state, to say nothing of the vital statistics to be gathered and the valuable information to be derived from them. All of our city boards of trade could publish information regarding the city or the state, for the benefit of prospective permanent residents, manufacturing plants, etc. Its increase or decrease, character of diseases, mortality rate per 100 of population and other valuable and correct data to be found in such an office, properly maintained, and of decided value to prospective citizens, with statistics on file to be referred to at a moment's notice. Such a board would not cost the state one-five-hundredth of the annual cost of not maintaining such board. The reason it is not done is that the people, the legislators, have been by us allowed to live in ignorance of these facts. They have no idea that such is the case; no conception of the far-reaching benefit to be derived from the maintenance of a state board of health, with city and county boards working in unison with them. Yet when we wish some so-called doctor's license revoked by our executive officers, no case can be found against them, in the eyes of the uneducated laymen and the officials elected by them to offices in civil government of affairs of state and county. No wrong is done, no offense is committed, for a man to practice medicine and be unworthy to belong to a medical society; too much of a criminal, or too little of a gentleman, for physicians who honor themselves and their profession to associate or consult with. Yet our ignorant officers of the law allow such men to practice, even when plying their trade against the few inadequate laws we have managed to get for our protection.

From a humane standpoint, we have humane officers and societies to protect our animals from abuse, yet none to protect the people from these unnecessary expenses, useless waste of life, property, suffering and misery incident to the spread of these preventable diseases. How many laymen, as they sympathize with the little cripple or hunchback on the street, or the family in destitute circumstances, the result of these diseases, realize that in all probability their infirmity and poverty is the direct result of inadequate knowledge of the things people and officers elected by them should know and be able to

cope with, and try to prevent, because they do know and recognize its value and importance to them by the light and education the medical profession has given them, through the proper channels—the ministry, lawmakers, teachers, and the press.

One of the governors of a state has well said: "If we had, through the misfortune of war, or the sudden rise of pestilence, or through some awful calamity, the destruction of life that annually takes place on account of tuberculosis, we should be appalled. Mass meetings would be held in every community and demands would be made that the most urgent measures should be adopted. It is only because we are accustomed to this waste of life and are prone to think it one of the dispensations of Providence that we go on about our business, little thinking of the preventable measures possible."

How many of our clergy, teachers, lawmakers and the press know how tuberculosis and the social evil are spread? How many know that they could be prevented or very materially decreased? Don't tell me that a public who dread diseases, fear death, sympathize with the blind and the cripple, or that an educated woman would bring into this world a child blind or crippled for life, or lend herself to a crime against the innocent, take chances with her own life and happiness by marrying a man stamped with any one of these diseases; that a people who try to protect their hogs from cholera, their crops from ruin, their cattle from disease, gathering statistics and studying the cause and prevention of these things, and doing all in their power to prevent them; don't say that an educated father or mother would not do our bidding to protect their offspring from these diseases and their far-reaching disastrous results.

If not from love and sympathy, from an economical standpoint only, were the public as enlightened on these things as they are on other points of public economy and welfare, war would be waged against these preventable and transferable diseases, money raised, legislation brought to bear; city, county, state and national government join together and ask aid and help from the profession which they know and recognize as of so much importance and inestimable value to the world. And in attempting to carry into effect that first and strongest law of nature, self-protection, they could not help but protect the better element of the medical

profession. The physician was never intended as a lawmaker, but we can and should be educators. If we begin to instruct the people, once they grasp the subject in all its importance to them, to their offspring, to society at large, laws will be enacted, ramparts built for the protection of the home; society will learn to ostracise those unfit to mingle with her, and in time the social evil subject and tuberculars will be as the leper of olden times—"unfit, unclean." There is no penalty to either now; but if the public is educated there will be, for humanity, both educated and ignorant, fear death, dread disease, seek economy, shy from increased taxation, the care of paupers and those unable to maintain themselves, much of which is due to these diseases and no knowledge of their prevention.

If taught, will not the people demand educated medical knowledge, appreciate the medical profession, who have elevated themselves to where they belong, dictators and guardians of public health? And those who prey on ignorance will hear the death knell of their vocation. At present what importance do the laity attach to a man being expelled from a medical society? Did the layman realize that as a rule an expulsion from a medical society takes place because a man is lacking in honor and those gentlemanly qualities required of and in the honest profession of medicine; did the laymen understand our code of ethics, what they are, would they admit a man into their homes who could not, or would not, live by that code?

Years ago the medical profession started at the center of a circle, working toward its outer border; each succeeding year has found them further and further from the center; many gone at a tangent, far beyond the very circumference. What we need now is for the better element of the profession, represented by members of the state societies, to begin at the circumference, and with one accord and in unison work toward a common center, upholding the code of ethics in our own ranks and lending our support and loyalty to the profession as a whole.

"Like small streams at first begun,

Unseen they rise, but gather as they run."

With a small beginning around a wide circumference, but all in unison working toward a common center, namely, to place the profession of medicine where it rightfully belongs, on the topmost pinnacle of public esteem and confidence, guarding and directing

the universe from epidemics, pestilence, transferable diseases; their results, the poverty, misery, sorrow and expense which follow them. Therefore, let us begin now to educate the laity, and they will soon prove their appreciation by protecting us and our interests. Let them remain ignorant, and so long as they do the fakers, swindlers, robbers and fourflushers will laugh at our negligence and our professional jealousies of each other. The circumference of our fast-widening circle will fade until there is neither circumference, circle nor center to work toward. And the dishonest fake and fourflusher will continue to grow fat, basking in the luxury of ill-gotten gain, made possible to him by our carelessness. The true medical profession will remain downtrodden, unprotected slaves to an ignorant public and their own negligence.

DISCUSSION.

Dr. Crutcher—I am not prepared this morning to discuss this paper critically, because the subject is too vast; but if I were asked to epitomize the methods of this meeting of the Arkansas Medical Society, the answer would be, Educate the laity. The address of President Clegg, the paper of Dr. Jenkins and the forthcoming paper of Surgeon Warren at the tuberculosis meeting tonight all point in the same direction. If I were asked in what direction our work should tend, the answer would be the same. I concede that the matter is fraught with some difficulty. There is a little feeling with the public of distrust for the medical profession. It comes from the fact that the people know that doctors differ. But if we go to them honestly, sincerely and frankly, however, we can persuade them that doctors are not the only people who differ. Lawyers differ, otherwise there would be very few civil cases in the courts. The matter is fraught with a difficulty in another direction. The honest man is a little afraid he will overstep the bounds of ethics. I have found in my experience, and I am a little bit proud of the fact, that the people I have practiced for longest I do less and less for all the time. They use less and less patent medicines all the time. It may have deprived me of some little revenue, but I am still proud of the fact. It is a difficult function to perform, but the doctor has the best opportunity, because he reaches the people at the bedside. First of all, we must persuade

them of two things. One, that the doctor of today is alert, progressive and up to date, and a man can do that without necessarily boosting himself. Secondly, we should stand together. I believe that the greatest bane to the medical profession today is that we are not a unit. When we do that we can not only educate the people at the bedside and elsewhere, not only gain their interest, but get them solidly behind us.

Dr. Meek—I want to say just a few words in commendation of Dr. Jenkins' paper. It is as good a paper as I ever listened to or read on that subject. As he said, we doctors are mainly responsible for the ignorance of the laity in regard to medicine. We ought to teach the people that there is no such thing as biliousness. I read a valuable paper on that not long ago in the Journal of the American Medical Association. A man has indigestion and they say he is bilious. Bile ought to be in the stomach and bowels—as much so as the bladder ought to contain urine. If a man vomits it is because he is sick at the stomach or has eaten something that did not agree with him, and reversed peristalsis takes place. We ought to teach the people that there is no such thing as congestion. If a doctor doesn't know what's the matter with a patient, he says he is bilious or else died of congestion. We ought to teach the people that cholera infantum or infantile cholera does not necessarily accompany teething. Many a poor infant has gone to its grave because some old lady in the neighborhood said, "That's nothing but teething; let it alone. That's nothing; don't check the bowels. Let them run on."

TYPHOID FEVER.*

E. R. Dibrell, M. D., Little Rock.

I do not propose to attempt a description of the whole of typhoid fever. The subject is too long, and many features most interesting will be skipped. Evidently the omitted parts will be brought out in the discussion. All of us believe we know something about it, while most of us are deficient in features about which we would like to know more. Hardly one hundred years have passed since it became separated from other fevers, but while our knowledge increases slowly, we pull up a little with each decade, so that by this time

we have a separate typhoid entity, a fever produced by the bacillus typhosis, discovered by Eberth and named for him. We are by means of this discovery enabled to apply intelligently methods for prevention, if we would or could exercise the precaution necessary. I am largely drawing on my own views and experience when I state that I have not been able to trace the presumed source of infection to what is regarded as the usual cause, namely, our water supply. Doubtless in most of the recorded epidemics the water is justly regarded as the real source of the poison; but as pertains to Little Rock, my efforts to trace have led me to believe that in more instances the impure milk has been responsible. The dairies have impressed me with a holy horror because of my belief that they are distributing to their customers a rich culture of these typhoid bacilli in a ripe condition, infecting here and there those who get the biggest dose at a time of susceptibility. Sometimes only one of a family becomes the victim. I admit that I am unable to account satisfactorily for the escape of the others, but the same difficulty presents itself if we could accuse the water supply.

Right here I do not believe that our river water can be justly accused of being unwholesome in this regard. The contamination by lime, copperas, etc., may be the cause of many dyspepsias and indigestions; but where I have been able to trace infection to possible water contamination there have been exposures to springs, which abound adjacent to our town, or to wells, and possibly cisterns, which so many prefer. As for myself, the taste of the doctored river water suits my palate, and I recommend others to acquire a similar preference.

Last summer I had four cases in one family, and, though the surroundings were not as sanitary as was desirable, there were other cases in the route of the same dairyman, and upon investigation by the Board of Health some member of his household had been down with "slow fever." He was refused permission to peddle milk for a season. I am not aware whether he has purified his surroundings or if he still does business from the old stand. Another and a fatal case evidently acquired the disease in an adjoining town, where, on a baseball expedition, he had drunk of spring water. At least, that was my notion about it. I don't know if there be a remedy to apply to this evil, unless the conscience of the community can be aroused sufficiently to

*Read before the Pulaski County Medical Society, February, 1910.

adopt the necessary measures. How would it do to have a doctor for mayor, and have him appoint a board of health who will be given means and power to thwart by efficient sanitation this avoidable pest? Every case of typhoid fever can justly blame somebody or something. And every death, therefore, is a homicide of criminal character.

I am not sure that we are quicker to recognize typhoid fever today than we were in the olden time. Frequently it is difficult under any circumstances. We used to claim ability to diagnose it in a week. If a round or two of calomel, followed by free use of quinin, did not stop its progress, by which time I will admit damage might have been done, we were ready in a week to give it some name, sometimes inappropriately, which conveyed the impression of its continued type. But even now we do not clinically form our correct opinions before Widal will give us response.

Recently I saw three cases which presented symptoms much alike, but not those of typhoid at the start. Each began with chills, followed by fever and sweating and subsidence of temperature, which seemed like intermittent fever. The first had naturally baffled the doctor, for two weeks had already passed, and this erratic malady had twice refused to be positive to Widal. The urine contained much albumin and casts, which led to the diagnosis of nephritis. Treatment accordingly was instituted which probably was instrumental in bringing on a copious and repeated hemorrhage from the bowels, by which time the serum clumped, but after he had already made up his mind. The second had corresponding symptoms, which came on with a similarly undefined record. The nose bled and there were slight catarrhal symptoms at the start, with albumin and casts. Widal was negative. About the eighth day lobular pneumonia was finally detected, and by the twelfth day the patient was well. We, however, did not have conviction from the Widal. We expected to keep on trying. Another had a sore throat at the start, with chills and fever, but no albumin in the urine. Quinin threatened to cure it, but about the second week of the disease, and a few days after my first visit, she had a bowel hemorrhage, after which she ran

a mild typhoid course, with recovery. She had no opportunities for a Widal. Many people are poor and can't afford it. Drug bills and doctor bills and laboratory bills amount to something. Another reason why a good board of health should be established to permit everybody to have recourse to science for its benefits.

Some three to five people out of every hundred who die of typhoid fever have perforation of the bowel. If anybody in Little Rock has experience in treating surgically this complication, I am not informed of it. I do not believe I recognize it, though I have tried to inform myself concerning its symptoms. There are many difficulties. In private practice we are not at the bedside enough to be on the watch. Our nurses resort too quickly to the convenient hypodermic, and we ourselves are probably too fond of giving opium to quiet the nervousness or to check a diarrhea. It is hard to withhold morphin for any of the nerve disorders of typhoid, for it fits in so much better than any other drug. I feel that the instances are rare when a purgative, or even a laxative, is needed. Some excellent doctors use calomel in small doses. Others treat from beginning to end with castor oil. I believe that the indications should be well marked to justify us in giving any drug that will increase the likelihood of hemorrhage. In a few cases of fatal hemorrhage I have believed that the doctor might have been too handy with his calomel. Though we know with every case hemorrhage is too frequent for our comfort, after all, though, if we recognize the fact of its being a general infection, and that the disease will get well, we are less likely to do harm by the too free use of drugs. I am not convinced that I ever saw any good from the internal use of turpentine or salol. I have thought hexamethylenetetramin did good, but recently I have been compelled to stop its use by reason of its too free action on the kidneys. I am thoroughly in favor of good whiskey when the cerebrospinal symptoms are marked, and give it, too, right freely. Hydrotherapy and diet are means upon which we are fairly agreed. I believe he who gives solid food makes a mistake. A good doctor who directs a good nurse is necessary. I believe we should have no routine treatment.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust building.

Editorials.

The headquarters for the annual meeting will be at the Marion Hotel. The annex is just about completed, and in their new banquet hall will be held our meetings, with plenty of committee rooms at our disposal.

The Program Committee has arranged for a symposium on the hookworm for Wednesday night, the second day of the state meeting. It will be open for the public. Dr. Charles W. Stiles, of Washington, D. C., will be present and deliver a lecture, which will be illustrated by stereopticon views. Also, others of note will take part.

As the time is fast approaching for the annual meeting of the State Society, you should begin making your arrangements to attend; and don't forget that while you have labored hard for the past year, with pos-

sibly no vacation, your wife has also contributed her part, and those of you who are doing the greatest work owe most to her, so bring her with you and give her a chance to get acquainted with you when dressed in your holiday attire and away from the every-day cares of a doctor's life. It will send her home with a renewed interest and vigor and a greater respect for your calling.

The Committee on Arrangements are specially going to look out for the entertainment of the visiting doctors' wives, daughters and sweethearts. The chairmen and secretaries of the various sections are hard at work, and the program promises to be the best in the history of the society.

There will be present several men of national reputation, who will contribute papers of vital interest to us all.

So come, and be sure to bring your wife.

ETHER: AN ANTIDOTE OF COCAIN AND STOVAIN POISONING.

Engstad, in the Journal of the American Medical Association for March 19, 1910, says:

"Directly after the introduction of cocain to the medical and dental professions, a number of accidents were reported, many of them fatal. The novelty of the drug and its effects were fascinating, and the want of experience and knowledge of its dangers, unrealized as they were by the majority of physicians, made it an extremely dangerous agent in other than the most careful hands. In common with most practitioners, I had my share of cases of cocain poisoning, though fortunately none proved fatal. By far the greatest number of deaths occurred in the hands of dentists. The use of the drug was an almost daily occurrence in their practice, and they seemed especially prone to disregard its dangers.

"About fifteen years ago I had as a next-door neighbor a dentist with a very large extraction practice, and it became a not uncommon occurrence for me to be called in hurriedly to help revive some patient. To my knowledge, he had at least fifteen cases of cocain poisoning. Some were mild cases; many were profound and extreme. The symptoms were rapid and shallow respiration, feeble or absent pulse, with unconsciousness; in some cases the patients were difficult to revive. Nearly all exhibited extreme mental anxiety and restlessness.

"In the first few cases I was called on to treat, strychnin and morphin in combination were used with marked benefit. But, as cases kept multiplying, I found the action of these drugs too slow, and I decided that there must be something to counteract the poison more rapidly when life was in extreme danger. It was necessary to find a remedy that could be administered at any time and be instantaneous in its action. I soon found ether to be the required drug. This was administered as ordinarily given to produce surgical narcosis. Ether stimulates the vasomotor system, is a tonic to the heart muscles, stimulates the action of the respiratory centers and of the brain and of the pneumogastric nerve, and increases the pulmonary circulation in the first stages. While cocain inhibits the action of the heart, especially on the right side, it has also a marked inhibitory action on the respiratory centers of the brain. Death may occur from feeble respiratory movements of the so-called Cheyne-Stokes type, or asphyxia.

"To me ether has proved extremely valuable. It has saved what seemed hopeless cases. It stimulates the heart and the respiratory system almost instantly. The pulse becomes fuller at once and of normal tension. The marked mental excitement is allayed as the patient goes under the influence of the ether, and the effect of the poison rapidly disappears. The individual regains consciousness as soon as the effect of the small amount of ether has disappeared.

"To get the best results, the anesthetic is administered only to the degree of mild surgical narcosis, or at times even less than this. A mask should be employed and the ether given by the drop method. This is all-important. Given by the old method, the ether would only add to the danger of asphyxia by excluding air from the venous blood engorged lungs.

"It occurred to me that this suggestion might be of help to others, as it has been to me. Just at present there is much interest in the work of Jonnesco and his use of stovain. Many physicians will undoubtedly be led to try stovain, or cocain, or some other synthetical preparation whose action is similar. While in Paris some years ago it was my privilege to witness Tuffier perform a number of operations under spinal anesthesia with cocain, all done in the brilliant style of this acknowledged master of surgical tech-

nic. In the last operation I saw in his clinic the patient did not bear the drug well, but began to show some very dangerous symptoms, and, in spite of the usual remedies, was soon in extremis. At my suggestion a few drops of ether were administered and all dangerous symptoms disappeared immediately."

PLAN FIGHT ON THE HOOKWORM.

An office and laboratory for the investigation and eradication of the hookworm in Arkansas will be established in Little Rock, if plans advocated by Dr. Wycliffe Rose, administrative secretary of the Rockefeller Sanitary Commission, to the State Board of Health, are adopted. The work in this state is to be in charge of an expert, who is to be selected by the State Board of Health, and is to be supported partly by the state and partly by the Rockefeller commission, which has charge of the disbursement of the \$1,000,000.00 fund provided by John D. Rockefeller to carry on the campaign against the hookworm.

Until aid can be secured from the legislature, it is thought possible that the work may be inaugurated and carried on through the aid of private donations.

The plan outlined Monday, March 21, by Dr. Rose is for the members of the State Board of Health to select some man whom they think qualified to take charge of the work in this state. Their selection must be approved by the Rockefeller commission. The individual selected will be expected to devote all his time to the work, and will have charge of an office and laboratory especially fitted for the investigation of the disease. Dr. Rose said that the man in charge of the state work would need at least one assistant, and would select agents over the state to coöperate in the campaign against the hookworm.

Before the fight can be waged in this state, Dr. Rose stated, it will be necessary for the legislature to make an appropriation to help defray the expenses of employing an expert to take charge of the state department and of maintaining the laboratory. He was told by the members of the State Board of Health that the legislature of this state had not yet made an appropriation for fighting the hookworm, nor for any work of the state board. —Arkansas Gazette.

HOOKWORM CONFERENCE.

The Southern Health Conference, the organization which resulted from the conference on hookworm disease, was launched in Atlanta, January 19-20, with the election of the following officers:

President—Dr. H. F. Harris, secretary of the Georgia State Board of Health.

Permanent Secretary—W. G. Cooper, secretary of the Atlanta Chamber of Commerce.

Vice Presidents—Dr. H. G. Perry, Alabama; Dr. Hiram Byrd, Florida; Wilmer L. Moore, Georgia; Dr. J. B. Marvin, Kentucky; Dr. J. A. Albright, Tennessee; Dr. E. G. Williams, Virginia; Dr. R. H. Lewis, North Carolina; Dr. S. H. McLain, Mississippi; Dr. G. H. Martin, Arkansas; Dr. William Weston, South Carolina; Dr. W. M. Brumby, Texas; Dr. George H. Dock, Louisiana; Dr. Woodward, District of Columbia; Dr. W. G. Baldwin, Hawaii; Major B. D. Taylor, United States Army; Passed Assistant Surgeon William Butler, United States Navy, and Major J. H. White, United States Marine Hospital Service.

The committee on by-laws and constitution, in their report, suggested that the membership of the organization consist of permanent members and delegates; permanent members to be such persons as choose to identify themselves with the organization and pay the fixed dues; delegates to be persons appointed as such by the governors of the states, by the state organizations of the various religious bodies, by the municipal authorities and chief commercial bodies of the cities of the states represented. Also by the life insurance companies and railroad companies operating in the South; by the women's clubs; by the labor organizations and by the Farmers' Union, and such bodies as the executive committee may see fit to invite to send delegates.

The report was accepted by unanimous vote.

A conspicuous figure, and really the man to whom, more than to any other, is due the present widespread agitation on the subject of hookworm disease, was Dr. C. W. Stiles, whose addresses were heard with intense interest. Other prominent speakers were Drs. Newton Evans and Wycliffe Rose, Nashville, Tenn.; George Dock, New Orleans; W. M. Brumley, president Texas State Board of Health; Frederick J. Mayer, New Orleans; Kingnon, of the United States Marine Corps; Wallace Butterick, New York; W. W. Lan-

drum, Louisville, Ky.; E. W. Schause, Cecil, Ga.; M. M. Head, Zebulon, Ga.; H. G. Perry, Greensboro, Ala., and R. M. Cunningham, Ensley, Ala.

There were two hundred odd delegates to the convention; fifteen states were represented, while one delegate came from Honolulu.

The three sessions were characterized by the absorbed attention of all present; by the coöperative spirit expressed in every feature, and by the distinguished character and ability of the individual men participating.

This conference, representing the first organized effort in the South, as a whole, to take up this particular line of work, represents the beginning of a great movement for health conservation in our Southland which is pregnant with the vastest possibilities.—Charlotte Medical Journal.

THE AMERICAN MEDICAL ASSOCIATION—ITS POLICIES AND ITS WORK.

I.—THE OPPOSITION AND ITS CAUSES.

The proprietary medicine business, until within the past five years, had a most phenomenal growth, and one which, considering the viciousness of the traffic, would have been impossible had it not been immensely profitable. The large returns drew to its ranks men without knowledge of medicine, pharmacy or chemistry; men who not only put up preparations for the medical profession to use, but also had the presumption to teach physicians how to use them—how to treat disease. Reputable manufacturing pharmaceutical houses, finding the demand for official and non-secret drugs falling off, were, one by one, almost forced by economic conditions into the secret proprietary business, until finally there was hardly a pharmaceutical concern that did not have many typical nostrums in its lists of "specialties." The Journal, like the other medical journals of that time, accepted advertisements of proprietary medicines which later proved to be fraudulent; there was no standard and no means of distinguishing the good from the bad. Thinking members of the medical profession realized the conditions and continually protested against them. The evil was discussed in society meetings, often with emphasis, but the agitation usually ended only in discussion, while such criticisms were smoothed over or eliminated when the re-

ports of the proceedings appeared in medical journals.

The proprietary "interests" were so powerful financially, they ramified in so many directions, and they affected so many in the medical profession itself, that the problem of attacking the evil seemed too large and too difficult, and the only result to be expected was failure, with villification and abuse, as the lot of those who attempted it. However, after much deliberation and with due regard for the attempts that already had been made, and especially with a full appreciation of the opposition to be expected and of the difficulties to be met, the movement against this evil was started by the formation of the Council on Pharmacy and Chemistry of the American Medical Association. The announcement of the creation of this council was received with great satisfaction by many, but encountered sneers, derision and open opposition, not only from the interests directly affected, but also from many medical journals. Nor did this journalistic opposition come entirely from publications whose paid subscription lists were insignificant and which absolutely owed their existence to their advertising patronage; it came, too, from some which were well supported by the medical profession. A defunct journal was resurrected by a certain group of nostrum-makers to oppose the movement. In it the members of the council, and especially its chairman, were ridiculed, cartooned and maligned. Since then scores of so-called medical journals have apparently existed for the sole purpose of attacking the American Medical Association and its officers, and of obstructing its efforts—and very naturally so, since such journals derive most of their support from those who are exploiting the profession.

About this time Collier's Weekly published that remarkable series of articles by Samuel Hopkins Adams, called "The Great American Fraud." The "patent medicine" people soothed themselves with the belief that the articles and the lessons they taught the public would soon be forgotten, as they undoubtedly would have been had they been allowed to remain as ephemeral newspaper matter. But the American Medical Association, obtaining permission to issue these articles in book form, published and distributed them by the thousands. The facts presented were thus preserved in the hands of individuals and libraries all over the country

and became a permanent and ever-living evidence of the fraud and viciousness that are inseparable from the "patent medicine" business, and of the gross impositions practiced on the public.¹ In addition to the exposures made by Mr. Adams, the chemical laboratory of the Association has been analyzing a host of "patent" and proprietary medicines, and The Journal has insistently and persistently tried to enlighten the public regarding this evil.

Naturally, therefore the "patent medicine" people were aroused, individually and collectively—as the Proprietary Association of America—and endeavored to poison the minds of the public against the American Medical Association. Pamphlets of various kinds have been—and are still being—sent broadcast, such, for example, as "The Political Doctors," "Confiscatory Legislation," "The Machinations of the American Medical Association," "The Legislative Schemes of the American Medical Association," and numerous others. The newspapers, especially, have been furnished with all kinds of misinformation regarding the American Medical Association and about what it is doing, but, happily, the majority of newspaper editors saw the animus back of it. A few, not knowing the facts, have said harsh things, using the material furnished them by the interests affected to attack the Association and the profession generally.

Thus, two directly related interests—the so-called ethical proprietary business and the "patent medicine" business—by fair means and foul have done their best to discredit and injure the Association. The former was—and still is—supported by a large number of journals, of small circulation, it is true, supposed to represent the medical profession; the latter, by the cheaper class of newspapers, influenced largely by the lure of advertising contracts.

Nor are the proprietary and "patent medicine" interests the only ones whose fraudulent profits have been cut down through the exposure of their methods by The Journal. After a campaign of public education lasting several years, Congress passed the Food and Drugs Act, and its passage was due in no small degree to the influence of the

1. How far-reaching an effect this has had may be imagined when it is realized that over 150,000 copies of this book have been printed. The widespread spontaneous demand for the book has been most gratifying. One disinterested layman alone purchased 45,000 copies for free distribution.

American Medical Association, with the help of the members of its constituent state and component county societies. Since its enactment *The Journal* has exerted even greater influence for the pure food law's honest and impartial enforcement; and this also has aroused the enmity and active opposition of manufacturers and dealers in sophisticated foods.

Thus—to say nothing of the unfriendly attitude of some of those connected with certain low-grade medical schools whose shortcomings have been shown up in *The Journal*, and without including the owners of the medical journals affected—there are three financially and politically powerful commercial interests combined for the common purpose of attempting to discredit and to weaken the Association and to obstruct its work. Failing to produce any result, and finding that their onslaughts on the Association only drove the profession into closer alliance, they pursued another course.

In the fall of 1908 some letters addressed to the president of a pharmaceutical concern, whose methods had been given unpleasant notoriety in *The Journal*, revealed the fact that a concerted attack on the editor of *The Journal* was under discussion. Their tenor was: "Stop attacking the Association, as you will do no good. Center it on Simmons, for he is responsible." Shortly after this, information was received that the individual to whom the letters were addressed, both by personal effort and through the efforts of detectives, was endeavoring to find something in the editor's life that might be damaging to his reputation.

Material obtained by going back thirty-eight years or more was craftily arranged by a Chicago physician, and was worked up so as to make the most damaging "case" possible. Articles were published in such of the cheaper medical journals as would print them, "addresses" were delivered before such medical societies as would tolerate them, newspaper interviews appeared, and especially, thousands—yes, hundreds of thousands—of pamphlets and reprints were circulated with an extravagance that indicated that expense was no object—all these methods were used to make public the matter which had been so assiduously collected. It is probable that during the last two years more money was spent in detective work, in printing and in postage in an attempt to blast the reputation of the editor of *The Journal*

than ever before was expended for a similar purpose. Being personal in character, this matter naturally could not be discussed in *The Journal*.

That these attacks were received with joy and utilized to the fullest extent by the proprietary and "patent medicine" interests goes without saying; in fact, the very "consumption cure" concern which we expose in this issue went so far as to reproduce in a newspaper advertisement the photograph of the physician circulating this matter and to extol him in these words: "For him to expose the methods of the A. M. A. is a God-send to every consumptive, as it clearly shows why the medical profession at large does not recommend Nature's Creation." And more recently the American Druggists' Syndicate, because *The Journal* has made clear the fraud, misrepresentation and deceit connected with its "patent medicine" business, has been using the material with absolute disregard of expense, circulating it among physicians and druggists throughout the country.²

These attacks, of course, have been regarded as a part of the general scheme of retaliation of those whose financial interests were being injured through the work of the Association; in a word, as coming from enemies who have good cause for fighting back.

II.—THOSE RESCINDED RESOLUTIONS.

From what has been said above, opposition and retaliation are to be looked for from those interests whose commercial existence is threatened by the work of the American Medical Association. Such enemies and such opposition were to be expected, and could, therefore, be reckoned with. An attack from within the ranks of the profession itself, however, is another matter. When, furthermore, it comes from one of the most progressive component societies, and one in whose territories is located the headquarters of the Association, the matter deserves comment.

The Council of the Chicago Medical Society, at its January meeting, adopted certain resolutions which purported to be based on the preamble that—

"Certain conditions exist which menace the best interests of the American Medical Association and of the medical profession at large."

2. See letter and comments in the J., A. M. A., February 19, p. 629.

These resolutions³ were published in the Society's Bulletin, and copies of them were sent officially to the various State Society journals. Unofficially, typewritten copies were sent—some at least in envelopes bearing the address of the individual who is reported to have made the original draft of the resolutions—to medical journals all over the country. Incidentally, the matter appeared with appropriate headings in the Chicago newspapers of the morning following. The resolutions were rescinded at the next meeting of the council, but the publicity given their adoption was strikingly absent in their rescindment. Because these resolutions have furnished the enemies of the Association with ammunition that is being and will continue to be used against it—as those who inspired them undoubtedly intended they should—it seems wise to give some consideration to what, in view of the fact that they have been rescinded, would ordinarily have required no comment.

Many—in fact, most—of these resolutions dealt with matters of Association policy, matters which have been up for consideration time and again and have been discussed pro and con. They are matters on which an honest difference of opinion may well exist, and are very proper questions for consideration if discussed by those having a full understanding of the points involved. Whether, for instance, one person should be permitted to hold at the same time more than one executive or honorary position in the Association; whether the office of general secretary and the position of editor should or should not be separated; whether the number of trustees should be increased or decreased; whether the initiative and referendum are feasible and desirable—all these are questions on which there may easily be differences of opinion. With such we may deal at length in the future.

A few of the resolutions, however, dealt not with matters of policy, not with theories, but with matters of demonstrable fact. To consider these in detail:

"All officers and employees whose duties involve financial responsibilities should be bonded."

The answer to this implication is simple and short: All such officers and employees are bonded and for years have been.

"The law governing admission to membership in the American Medical Association should be so amended as to make it mandatory on the secretary to enroll applicants who have complied with the provisions and by-laws governing the same."

The secretary never has refused to enroll such applicants, and under the present by-laws, which have been in force for years, could not if he would.

"Space should be set apart in The Journal for free and courteous discussion of the policies and methods of the Association or for any other matters that may appeal to the membership at large as bearing on the interests of the Association."

Such space always has been available and never has been denied those who wished courteously to present matters of interest to the Association. What constitutes "matters of interest" always has been and always must be determined by the editor—past, present or future; that is one of an editor's functions. Any other method of conducting a journal would result in chaos.

"No member should be expelled from the Association without a fair trial and full hearing."

Under the present laws, and they have been in force for years, no member *can be* expelled from the Association, either with or without trial, for the American Medical Association has no voice in the matter. Right to membership in the Association depends entirely on membership in the county society, and when a physician ceases—voluntarily or involuntarily—to be a member of his county society he thereby loses his right to membership in the state society and in the American Medical Association.

The reason space is given to a consideration of the foregoing resolutions is not only that the direct statements contained therein are misleading or absurd—and they are both—but that each one carries with it an implication, more or less veiled, of official negligence or dereliction. The resolution regarding the bonding of employees implies that responsible officials are not bonded; that dealing with the enrollment of members gives the impression that the secretary has refused to enroll applicants who were eligible; that providing free discussions in The Journal insinuates that freedom of discussion is not to be had; that referring to the loss of membership intimates that the Association has not only the power to expel its members, but that

3. The resolutions appeared in The J., A. M. A., January 29, 1910, page 382; notice of their rescindment appeared in The Journal, February 12, 1910, page 543.

its members actually have been expelled without a "fair trial and full hearing"—all of which implications are false and unwarranted libels on the Association and its officers.

If the majority of those members of the council of the Chicago Medical Society who voted for these resolutions had realized what there was behind them, then the only explanation of their action would have been that of sheer maliciousness. But we believe—in fact, we know—that many of those who voted for them had no clear conception of the conditions which were supposedly under consideration. With an honesty of purpose that was superior to their judgment, they allowed themselves to be used as catspaws to pull out of the fire the chestnuts of personal spite of one or two individuals. That they did so was unfortunate in that it gave the common enemy reason for rejoicing and lent color to the rumor so assiduously promulgated by the proprietary and "patent medicine" interests that there are internal dissensions in the American Medical Association—a rumor which is as false as it is persistent.

We know that the medical profession has never been so united as it is today; we know that the attempts to better the scientific, economic and social conditions in the profession itself are receiving hearty support and cooperation; we know that the campaign against fraud and deceit in proprietary medicines is meeting the approval of all right-thinking physicians; we know, in fact, that the great mass of the medical profession of the United States is heartily in sympathy with the critical and constructive work which the American Medical Association is doing through *The Journal* and through its standing boards and committees; and this knowledge is in itself an inspiration to larger and better things.

That the organization which has grown so wonderfully in the past decade is capable of improvement none realizes more keenly than those who have so earnestly striven to perfect it; that criticisms and suggestions will help to bring about such readjustments in the machinery of the Association as changed conditions make necessary, its best friends have always maintained; that such criticisms and suggestions are, and always have been, welcomed by those to whom the Association has intrusted its executive work goes without saying. But while all this is true, no one will question the principle that for criticism to be of any value it must be of a construc-

tive and not a destructive nature, and, further, that it must come from those who are at least fairly familiar with the conditions which it is desired to better. To suggest changes in the constitution and by-laws of an organization for no other actual purpose—whatever the nominal purpose may be—than of satisfying personal pique or for political expediency, is not criticism—it is denunciation. That opposition should have developed is not to be wondered at, rather is it to be welcomed; it is only moving bodies that meet resistance. That self-seeking or revengeful individuals should ally themselves with the open enemies of the profession is not surprising, but once their object is made clear they cease to be a menace.

One thing the passage of these resolutions shows: The rank and file of the Association are not as familiar with the details of their great organization as they should be. If men of more than ordinary intelligence and ability, such as those composing the business body of the Chicago Medical Society, could be misled on points so fundamental and elemental in nature, then it is safe to assume that a great majority of the members of the Association need to be better informed about the Association itself. This being so, we purpose to review briefly, in future issues, the history of the American Medical Association and its development during the past ten years and show what has been, and is being, accomplished in the interest of both the medical profession and the public.—*Journal of the American Medical Association*, March 5, 1910.

COST OF CITY GOVERNMENTS.

THERE WAS A PROGRESSIVE INCREASE EVERYWHERE UNTIL 1907.

Washington, D. C., March 6, 1910.—In the United States Census Bureau's special annual report for 1907 on the statistics of 158 of the largest cities, which is in press, it is shown that the per capita running expenses of the government in 148 of the largest cities increased from \$13.36 in 1902 to \$15.91 in 1907. There has been a progressive increase in nearly every department of the government. The per capita increase in the fire department was from \$1.33 to \$1.61; in the health department from \$0.22 to \$0.29; in charities and corrections, from \$0.86 to \$1.06; and in education from \$3.85 to \$4.70.

Of special interest in a comparison of the general expenses of the cities are payments

for the maintenance of the health department. In several cities the state maintains a dispensary or health bureau, but in most cities nearly all the expense of the care of the public health is borne by the city alone. New York paid \$1,691,560.00 for the maintenance of its health department, or more than six times as much as any other city. The other cities paying more than \$200,000.00 for the maintenance of this department were: Chicago (\$261,614.00), Philadelphia (\$253,709.00), and San Francisco (\$240,198.00).

Cities of over 300,000 population with notably small payments for their health departments were: Detroit (\$32,987.00), Milwaukee (\$40,417.00), and Buffalo (\$44,358.00). In the smaller cities the large expenditures of Los Angeles and Oakland, Cal., reflect payments for the suppression of the bubonic plague.

The payments for schools, libraries and art galleries of the cities considered were 29.6 per cent of the total running expenses of the government. Of the cities of over 300,000 population, the percentage spent for education was highest in Cleveland, Ohio (33.1); in cities of from 100,000 to 300,000 population, the highest percentages were in Scranton, Pa. (51.5), and Seattle, Wash. (46.2); in cities of from 50,000 to 100,000 population, in Salt Lake City (48.2), and Des Moines, Iowa (46.3), and in the smaller cities, in Topeka, Kan. (54.5), and Lincoln, Neb. (53.5). Payments for outlays are not included in the above computations.

NO UNCARED-FOR TUBERCULOSIS IN 1915.

The local committees of the New York State Charities Aid Association will hold a conference in Albany on March 18 and 19. There will be four sessions, two on each day, closing with a public mass meeting on Saturday, at which the speakers will be President Taft, Governor Hughes, Dr. E. L. Trudeau, Dr. Simon Flexner, Mr. Robert W. De Forest, and Mr. Homer Folks. Among the subjects to be discussed at this conference are the "Discovery and Supervision of Cases in the Home," "Tuberculosis as a School Problem," and "The Institutional Care of Tuberculosis as the Best Means of Prevention and Cure." The conference will celebrate the beginning of a new period of the work being carried on by the committees of the State Charities Aid Association on the prevention of tuberculosis,

which has for its aim adequate provision for every case of tuberculosis in the State by 1915, and a marked reduction in the death rate from tuberculosis by 1920. On Sunday, April 24, which is National Tuberculosis Sunday, sermons will be preached in every city in the state on the text, "No Uncared-for Tuberculosis in 1915."—New York Medical Journal.

THE NEW POLYCLINIC HOSPITAL.

While the work of tearing down the buildings on the new site for the hospital, in West Fiftieth Street, has already been started, the actual building operations will not begin until May 1. It is said that the generous subscriptions to the building fund that have been received recently have made it possible to materially enlarge the original plans. The present building in East Thirty-fourth Street, which has been headquarters for the hospital and medical school ever since it was organized, will be retained until May, 1911, when the property will be sold. The new hospital will be ten stories in height, fronting ninety-five feet on Fiftieth Street. The total cost, including equipment, will be about \$700,000.00. The Polyclinic in its new home will resume the ambulance service recently abolished by Roosevelt Hospital. The three upper floors will be devoted to private wards, with accommodations for seventy patients. The ground floor will contain the administration offices, and the remainder of the building will be used for charity patients, with accommodations for about two hundred and fifty. In addition, there will be a large clinic and operating rooms, and a free dispensary will be maintained, with headquarters on the second floor.—New York Medical Journal.

AN ADDRESS.

To the Professors of Materia Medica and Therapeutics in the Medical Colleges, and to the Medical Delegates to the Pharmacopeial Convention, May 10, 1910:

Dear Sirs—The department of Medical Temperance of the National Woman's Christian Temperance Union respectfully requests that you consider carefully the following arguments for the omission of whiskey and brandy from the next revision of the Pharmacopeia, and requests that you use your influence to secure this:

1. The Pharmacopeia is claimed to reflect the best medical practice of the time. This

department has collected statistics from hospitals all over the world, and the opinions of many of the leading physicians of this and other countries. These statistics show conclusively that the use of alcoholic liquors as medicinal agents has diminished in all hospitals and in the practice of most physicians; in fact, many physicians state that they never have occasion to prescribe alcohol in any form. It seems to us that in view of these facts the retention of whiskey and brandy in the U. S. P. places the medical profession in a false light. In this connection, it may be noted that only two pharmacopeias recognize whiskey—that of Greece and our own. If a substance which has been known so well, and for so long a time, possessed valuable medicinal properties, is it conceivable that other nations would not have included it in their pharmacopeias? The Therapeutic Committee of the British Medical Association has recommended the omission of brandy (the only distilled liquor in the British Pharmacopeia) from the British Pharmacopeia.

2. The retention of whiskey and brandy in the Pharmacopeia deceives the public in regard to the medicinal value of these substances. One of the strongest arguments advanced by the liquor dealers and the manufacturers of patent medicines is that whiskey and brandy, or the ingredients of the patent medicines, are contained in the Pharmacopeia, and thus receive the sanction of the medical profession. It is difficult for the individual physician, who is advising his patient against the use of whiskey and patent medicines, to counteract the false impression thus conveyed. W. C. T. U. workers find the same difficulty in trying to teach women to avoid the self-prescription of alcoholic liquors and patent medicines, a work which has the endorsement of all good physicians.

3. As is well known, the whiskey interests are thoroughly organized, and are using every means possible to secure the endorsement of the medical profession for the use of alcohol. There is nothing else in the Pharmacopeia which has such vast commercial interests as whiskey. It is probably more important commercially than all of the drugs in the Pharmacopeia combined, and it is certain those interested in it will use every effort to get it endorsed by the convention. Is it not unfair, both to the medical profession and to the public, which looks to the medical profession for guidance in such matters, for a substance of such extremely limited value, if it

has any, medicinally, to occupy such a conspicuous position? It seems to us unfortunate for the Pharmacopeia to be exploited commercially. The chairman of the present Committee of Revision has frequently spoken of the bribes (in one case amounting to \$5,500) offered him if he would change certain words in the Pharmacopeia. It would be most unfortunate for the influence of physicians for any suspicion to be cast upon the motives governing the attitude of the Pharmacopeia, and we believe that there is no subject in which this attitude could be more easily misunderstood and misrepresented than in the case of whiskey.

There are other preparations in the U. S. P. to which we should like to direct your attention. The International Conference for the Unification of Formulas for Potent Medicaments urged that no such medicaments be made in the form of wines. This action was taken entirely for scientific reasons. Nearly all of the pharmacopeias have discontinued the use of wine as a pharmaceutical agent. The U. S. P., however, contains at least eight such wines, one of which, wine of coca, has the reputation of being used as a beverage rather than as a legitimate drug. Other of these wines are, no doubt, used for beverage purposes also. May we not urge you to use your influence in securing the omission of these preparations, which are admitted to be unscientific, and which we know are a foe to temperance, and which place the medical profession in a false light, that of being on the side of the liquor seller in the present struggle against intemperance?

With the highest respect for your profession,

Yours very sincerely,

MARTHA M. ALLEN,

Superintendent of Medical Temperance for the World's and National W. C. T. U.

A NATIONAL TUBERCULOSIS SUNDAY ON APRIL 24.

CHURCHES ARE BEING ENLISTED IN CONSUMPTION CRUSADE.

The National Association for the Study and Prevention of Tuberculosis announces that on April 24 a national tuberculosis Sunday will be held in the churches of the United States.

Following campaigns against consumption that have been carried on in the churches of hundreds of cities, and sermons on tuberculo-

sis that have been preached before thousands of congregations during the past year, a movement has been started to establish a permanent tuberculosis Sunday, on which it is hoped that every one of the 33,000,000 churchgoers in the United States will hear the gospel of health. It is planned to enlist the active coöperation of anti-tuberculosis organizations, labor unions, fraternal organizations and other bodies, together with the churches, in the movement. The aid of leading churchmen in many of the principal denominations has already been offered. All of the large interdenominational bodies, such as the Young Men's Christian Association, the Young Women's Christian Association, the King's Daughters and Sons and the various young people's societies are also in sympathy with the anti-tuberculosis campaign.

It is planned that on April 24 tuberculosis sermons shall be preached in all the churches of the country. Literature will be distributed to members of the congregations, and in every way an effort will be made to teach that tuberculosis is a dangerous disease and that it can be prevented and cured.

Clergymen who desire to obtain additional information in regard to tuberculosis will be able to secure literature from state and local anti-tuberculosis associations and boards of health, as well as from the National Association.

ANTITUBERCULOSIS SOCIETY OF FORT SMITH.

Points brought out at the annual meeting of the Fort Smith Antituberculosis Society Tuesday night, February 15:

Leading physicians will be detailed to give lectures on health in the public schools.

The society has a good working cash balance in the treasury.

Arkansas owes the state sanatorium largely to the active campaign of Fort Smith men and the Fort Smith society.

The society is urging the county to establish a tuberculosis pavilion for the segregation of tuberculosis patients under county charge.

At the last meeting of the county medical society it developed that the physicians were convinced that the lives of seven of the nine children who died in Fort Smith last fall of diphtheria might have been saved had the physicians had the aid of the city bacteriologist and equipment contemplated in the ordinance which has never been put in force.

That the records of this city show that 12½ per cent of the deaths in Fort Smith last year were chargeable to tuberculosis.

The society warmly endorsed the movement of the Huntington Herald for the installation of Whitehall cottage, and urged the necessity for similar movements throughout the county.

That the principal means of spreading tuberculosis in this city were dust and the public drinking cup, and indifference of parents.

That common drinking cups are still in use in the schools.

Resolution offered by Judge Hill and unanimously adopted urging the putting in operation of the city physician ordinance.

Rochelle, La., March 5, 1910.

To the Editor:

In the February issue I notice you make some corrections for the January issue about the papers on Extrauterine Pregnancy, which were read at the meeting at Pine Bluff last May. I also wish to make some corrections, too, as my name was used freely in the discussion, and I was made to say some things and ask some questions that were more of a personal nature than it seemed should be.

I want to say that I was not present at all during the discussion, as I had to catch my train home just after reading my paper. It was some other man whose discussion was attributed to me. Please make this correction, and oblige.

Yours respectfully,

G. E. CANNON, M. D.

[These errors are attributable to the stenographer. He did not know the party speaking and failed to get the name correctly. Someone alongside told him it was Dr. Cannon, or at least he so understood, and jotted it down that way. I regret exceedingly that this error occurred.—Editor.]

Personals.

Dr. Frank A. Gray has returned from a postgraduate course in Chicago, and has changed his location from Cave City to Batesville.

Dr. J. S. Shibley, of Paris, who is the superintendent-elect of the State Tuberculosis Sanatorium, spent March 18 in the city on his way East. He will spend the next six

weeks visiting the various tuberculosis sanatoria, looking for new ideas and methods for our state institution.

Dr. W. S. Stewart, of Pine Bluff, passed through the city March 22 on his way to Van Buren, having been called there by the serious illness of his sister.

Dr. Horace E. Ruff, of Heber, is attending the Land Congress and boosting the numerous sulphur springs of his town.

Drs. C. E. Wright and M. A. Shelton, of Altheimer, have formed a copartnership.

Dr. W. C. Dunaway sustained a fracture of the fibula, February 26, in alighting from a street car, the steps of which were covered with ice. At this writing he is convalescing rapidly, and hopes soon to be around.

CHANGE OF ADDRESS.

Dr. C. H. Nelson, Washington to Nashville.

Dr. J. E. Elliott, Traskwood to Mabelvale.

Deaths.

J. Fred Brown, M. D., Medical Department, University of Arkansas, 1891; member Faulkner County and State Medical Societies, died at his home in Conway, March 10, after a short illness from pneumonia, aged forty.

John Wilson Martin, M. D., New Orleans School of Medicine, 1846; one of the oldest practitioners of southeastern Arkansas; a Confederate veteran, and for several years president of the Merchants and Planters Bank of Warren, died at his home in that city, February 11, from cerebral hemorrhage, aged ninety-one.

Dr. Bradford E. Meadows was stricken with pneumonia on October 28 and passed away after ten days' illness. He had practiced medicine continuously since 1889, and faithfully and honorably did he labor until the last, which sickness was caused by exposure in the discharge of his duties to the sick and afflicted. His whole life was one of self-sacrifice. He was well known all over the state, having been born and reared in Arkansas. He lived a noble and lovable life; and died as he lived.

T. M.

County Societies.

JEFFERSON COUNTY.—The Jefferson County Medical Society met in regular session at the office of Dr. Crutcher, with the following members present: Drs. Williams, Sr., Woodul, Crutcher, Stewart, Breathwitt, Scales and Lowe. Dr. Story, of Louisiana, was a visitor. The president and vice president being absent, Dr. Lowe called the meeting to order and Dr. Scales was elected chairman pro tem. The minutes of the last meeting were read, corrected and adopted. The Committee on Fee Bills was urgently requested to make report at the next regular meeting. A motion was made and carried that the society discharge the committee appointed some time ago to arrange for a banquet and appoint another committee to confer with them to have a joint banquet of physicians and druggists some time during the month of March. At this banquet some subjects which are of vital interest to both the physicians and druggists, as well as to the best interests of the laity, were to be discussed, believing that a closer relationship of druggist and physician would result in more common good to the people. Dr. Lowe was appointed a committee of one to confer with the druggists. Dr. Scales was elected delegate to the state meeting, and Dr. Lowe elected alternate. Dr. Scales read a paper on refraction, which was very refreshing and instructive. A vote of thanks was extended to him by the society.

W. T. LOWE, *Secretary*.

JOHNSON COUNTY.—The Johnson County Medical Society met in the secretary's office at Clarksville, Monday, March 7. Papers were read by Dr. E. C. Hunt on "Acute Bright's Disease" and by Dr. L. C. Gray on "Apomorphia."

L. A. COOK, *Secretary*.

SALINE COUNTY.—The Saline County Medical Society met in Benton on Monday, February 28, 1910, with the following members present: Drs. Phillips, Scott, Fisher and Prickett. After transacting other business, the following officers were elected: President, D. N. Fisher, Benton; vice president, Warren Kelly, Benton; secretary and treasurer, C. Prickett, Traskwood; delegate to the State Association, J. M. Phillips, Benton; alternate,

J. W. Melton, Alum. The society requested the county judge to appoint a county board of health for Saline County, and, upon the recommendation of the society, Judge Donham appointed Dr. D. N. Fisher president of the board, with Dr. J. M. Phillips and Dr. Warren Kelly, all of Benton. The society adjourned to meet again in Benton on the first Monday in April.

C. PRICKETT, *Secretary*.

POLK COUNTY.—The annual meeting of the Polk County Medical Society was held on February 22. Dr. Philip Ross Watkins was elected president for 1910, with Dr. David Connally vice president. Dr. Frank A. Lee was reelected secretary and treasurer. Drs. W. P. Parks and J. R. Davis were elected as delegates to the State Medical Society at Little Rock in May. Dr. Charles Sanford, of Board Camp, Dr. Mullens, of Hatfield, and Dr. W. P. Parks, of Mena, were elected censors for one, two and three years, respectively. A very interesting program was outlined for the post-graduate work in the society for 1910, and it is anticipated that the society will make much progress under the present interest that is manifested by all the members. Dr. E. M. Jennings, who has recently passed his eighty-fifth birthday, and who has practiced medicine in Polk County for more than thirty years, was made an honorary member of the society.

F. A. LEE, *Secretary*.

MISSISSIPPI COUNTY.—The Mississippi County Medical Society held its annual election of officers at Blytheville, Tuesday, March 8. The following officers were elected: President, Dr. R. P. Nall, Armorer; vice presidents, Dr. E. E. Craig, Pecan Point, and Dr. W. H. Borum, Blytheville; secretary-treasurer, Dr. O. Howton, Osceola (reelected); delegate to the state meeting, Dr. T. G. Brewer, Osceola; alternates, Drs. H. F. Crawford, Wilson, and T. F. Hudson, Luxora.

The following is the secretary's annual report:

Number of meetings for the year, 9; average number present at each meeting, 11; total number of papers read during the year, 23; average number of papers actually read at each meeting, 2⁵; number of papers read by physicians who were not members, 3.

There was no scientific program rendered at this meeting. All unfinished business was

disposed of, and the society adjourned to meet at Osceola April 12, 1910.

The following resolution was adopted:

"Whereas, The society learns with profound regret of the prolonged illness of Dr. R. C. Prewitt, an ex-president and worthy member of this society; therefore, be it

"Resolved, That our hearts go out in sympathy to our afflicted friend and colleague, and we take this means of assuring him of our continued friendship and respect, and of our sincere wishes for his early recovery and return to his usual place in our midst, and that our secretary be requested to furnish Dr. Prewitt a copy of this resolution."

O. HOWTON, *Secretary*.

Book Reviews.

A Text-Book on the Principles and Practice of Surgery. By George Emerson Brewer, M. D., Professor of Clinical Surgery in the College of Physicians and Surgeons, New York. Octavo, 908 pages, 415 engravings and 14 full-page plates. Cloth, \$5.00, net; leather, \$6.00, net. Lea & Febiger, Philadelphia and New York, 1909.

It requires a broad knowledge of surgery to present what is really important, and in so concise a form that it requires only a volume of less than a thousand pages. The author frankly states that in his first edition the effort to condense was carried too far, so in order to represent the surgery of today he has revised every line of his work and incorporated new matter to the extent of two hundred pages. It is interesting to note that the new process of color photography direct from nature has been employed in this work for the first time in medical literature. This work answers all requirements of the student and general practitioner.

A Text-book of Practical Therapeutics. With special reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Amory Hare, M. D., Professor of Therapeutics in the Jefferson Medical College of Philadelphia. Thirteenth edition, thoroughly revised. Octavo, 951 pages, with 122 engravings, and four full-page colored plates. Cloth, \$4.00, net; leather, \$5.00, net; half morocco, \$5.50, net. Lea & Febiger, Philadelphia and New York, 1909.

This work, which has now reached its thirteenth edition, needs little or no commendation from the reviewer. The author divides his subjects so as to cover the field. First taking up the underlying principles of therapeutics, next taking up the drugs of value,

and then the non-medical remedies, including diet, he finally considers the various diseases and treatments. He takes up the newer remedies—taoxyl, as a substitute for the old arsenical preparations; phenothalein, in constipation; soleglote of ethel and novaspirin in the treatment of rheumatism and gout, and several others, bringing it up to date.

Surgery; Its Principles and Practice. In five volumes. By sixty-six eminent surgeons. Edited by W. W. Keen, M. D., LL. D., Hon. F. R. C. S., Eng. and Edin., Emeritus Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia. Volume V, octavo of 1,274 pages, with 550 illustrations, forty-five in colors. Philadelphia and London; W. B. Saunders Company, 1909. Per volume: Cloth, \$7.00 net; half morocco, \$8.00 net.

Volume V has been received, and completed the great undertaking of Dr. Keen and his sixty-six collaborators to give the medical profession this voluminous surgical masterpiece. The prospectus promised five volumes of 800 pages each, but the completed work contains 5,500 pages. The contents of this, the last volume, embraces the following subjects; handled by men of international prominence, and whose very words are regarded as authority wherever the science of surgery is known and taught:

"Surgery of the Vascular System," by Rudolph Matas.

"Surgery of the Female Genito-Urinary Organs," by E. E. Montgomery, John M. Fisher and P. Brooke Bland.

"Surgical Technic," by John H. Gibbon.

"Ligation of Arteries in Continuity," by Warren Stone Bilkham.

"Operations on Bones and Joints," by Peter James Warbassee.

"Amputations," by Warren Stone Bilkham.

"Plastic, or Reconstructive Surgery," by John B. Roberts.

"Surgery of Accidents," by William L. Estes.

"Surgery of the Parathyroid Bodies," by Charles H. Mayo.

"Intercranial Surgery of Trigeminal and Auditory Nerves," by Charles H. Frazier.

"General Anesthesia and Anesthetics," by Hobart Amory Hare.

"Local and Spinal Anesthesia," by Carl G. Lenwawnder and Frederick Zachrissov.

"The Surgery of Infectious Diseases," by George E. Armstrong.

"The Use of the X-ray and Radium in Surgery," by Ernest Amory Codman.

"The Legal Relations of the Surgeon," by Hampton L. Carson, Esq.

"The Laboratory as an Aid to Surgical Technic and Surgical Diagnosis," by William M. Late Coplin.

"The Surgical Organization of a Hospital," by A. J. Ochsner.

These men, like the others who have contributed to this work, have performed their labors in a way that reflects credit, and will bring much honor to America. No man in the world stands higher and is more dearly beloved than W. W. Keen. No better editors than Keen and Da Costa could have been found. The selection of all who have contributed, from editors to and including artists, publishers and employees, have proven their capabilities in the completion of this great work, which will stand for years as the peer of surgical literature.

It is the greatest contribution to surgical science in the world.

C. C. S.

ANNOUNCEMENT.

W. B. Saunders Company, the medical publishers of Philadelphia and London, have just issued a new edition—the thirteenth—of their handsome illustrated catalogue. It contains some twenty new books and new editions, and besides numerous black-and-white illustrations there are two color cuts of special value. We strongly advise every physician to obtain a copy—sent for the asking. It will prove a ready guide to good medical books—books that we all need in our daily work.

IMPORTANT NOTICE.

Those of our readers who are interested in the various forms of physiologic therapeutics (including hydrotherapy, electrotherapy, massage, hyperemia, etc.), will be glad to know that it is proposed to shortly inaugurate a new journal devoted solely to the delineation of the progress made in these lines of therapeutic endeavor.

The American Journal of Physiologic Therapeutics will be published monthly, and the subscription price will be \$1.00 a year. The names and addresses of all interested physicians should be sent in, and those desirous of subscribing at once may enclose their remittance when writing. It is to be hoped that a widespread interest may be aroused in this matter. Write *now*, while this is fresh in your mind, to the American Journal of Physiologic Therapeutics, 72 Madison Street, Chicago.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.
 Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.
 Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Soliman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.
 First Vice President—H. D. Wood, Fayetteville.
 Second Vice President—E. L. Watson, Newport.
 Third Vice President—F. A. Corn, Lonoke.
 Treasurer—J. S. Wood, Hot Springs.
 Secretary—Morgan Smith, Little Rock.
 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.
 Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.
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 Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.
 State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.
 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-10.

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 Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.
 Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.
 Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathitt, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.
 Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.
 Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.
 Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.
 Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.
 Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

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 Fifth District—George S. Brown, President, Conway.
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Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
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Boone	R. S. Crebs	Olvey	L. J. Sims	Harrison
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Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
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Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
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Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cunningham	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Osceola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Ouachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
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Polk	W. P. Parks	Mena	F. A. Lee	Mena
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Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Summers	Elm Springs	Nina V. Hardin	Fayetteville
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Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzie	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

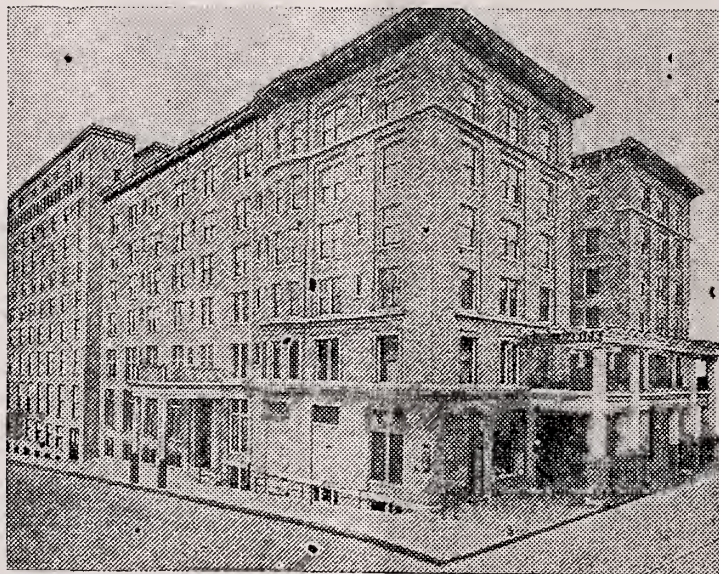
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In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. VI.

LITTLE ROCK, ARKANSAS, APRIL, 1910.

No. 11

Original Articles.

THE COLLECTION OF MORBIDITY AND MORTALITY STATISTICS IN RELATION TO THE CONTROL OF TUBERCULOSIS.*

D. S. Warren, M. D., of the Bureau of Public Health and Marine Hospital Service, Washington, D. C.

Dr. Warren: The title of my paper is somewhat different from what it appears on the program, "Vital Statistics." It is on "The Collection of Morbidity and Mortality Statistics in Relation to the Control of Tuberculosis." I have here some forms of death and birth certificates, original and duplicate, recommended by the Census Bureau to be adopted by as many of the States as possible. I shall be pleased to have you look at them, and offer any suggestions.

I was struck by the cases just reported by Drs. Walt and Sweatland. This presentation of patients shows what can be done at home, and this is what must be done. It is the home cure of tuberculosis. There are thousands of tubercular patients wandering over the territories of New Mexico and Arizona and states of California, Colorado and Texas, homeless objects of charity. We ought to keep these patients at home where you can do something for them. There is proof that you can do something. These cases are now what you call "closed cases." The danger of infection in the home is reduced to the minimum. But how much easier and better would have been the doctor's treatment if these cases could have been found earlier—in the incipient stage. This is where we want to begin,

instead of two or three years in accomplishing results you have seen, they could have been cured in a few months.

In considering public health work, two problems present themselves—sanitary and legal. In every department of this work we find sanitary science far in advance of legislation. This is discouragingly true when we come to consider morbidity and mortality statistics. This fact is remarkable when we consider their necessity in all public health work and how impossible it is to pursue any rational plan without them as a groundwork.

Everyone is ready to concede this without argument. All medical societies realize it in their deliberations. All engaged in public health work are clamoring for statistics, and still reliable mortality statistics are collected in but a small area of the United States, and morbidity statistics are collected only by a few of the larger cities, and the reliability of these may be seriously questioned. When one comes to consider the registration area of mortality statistics in the United States, as recognized by the Census Bureau, only one Southern state (Maryland) is found in it.

The South has not made the progress in this direction that it has in others. This lack of attention to sanitary matters is telling against it in financial progress. The investor hesitates to place his money in a country which he considers unhealthy. Some of the large life insurance companies will not write insurance below certain parallels of latitude. All give as their reason that it is semi-tropical and subject to so much greater risk on account of the heat, etc.

Now, under modern sanitary methods we know this is not true, as witness the health conditions in Havana, Manila and Panama under the enforcement of modern sanitary laws.

Before the Civil war the Old South was not considered an unhealthy zone by its

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

Northern neighbors. In those days the planter lived on his plantation with his big, old-fashioned residence, and the negro lived in quarters provided by his master, with good food and clothing furnished on a basis to bring about the strongest and healthiest condition possible, as that meant the greatest financial returns. The spread of controllable diseases was not nearly so likely under such conditions, even though present sanitary methods were then unknown.

Conditions have changed. The negroes have either left the farms to crowd into the cities or have been left by the whites on farms extending over great sections of the states known as the "black belt," where there are ten negroes to one white. This condition, with the poverty resulting from the war, accounts for the greater part of unhealthy conditions. With poverty and overcrowding comes a great increase in the tuberculosis death rate. Even in the country districts, where the death rate should be lower than in the large cities, it would, if correctly reported, exceed that of the cities.

The negroes in the black belt are left to themselves, and with their improvident nature, are poorly housed, fed and clothed, especially during the winter months. They crowd into their little huts, scantily clothed, to collect around one little fire during the long winter nights, and sleep three and four in a bed for lack of covering, waking next morning to eat a breakfast of corn cake, and maybe a piece of fat meat and a cup of coffee. The grown-ups spit on the floor, which is seldom if ever cleaned. The babies crawl over the same floor, soiling it at will, and eating whatever is given them after probably scouring it on the floor. The negroes seldom bathe, probably wash their faces and hands once a day in a common wash basin. The discharges from their bodies are deposited about the yard, indiscriminately.

This picture is not overdrawn. I know of what I am speaking, for I practiced medicine in one of the black belts of Alabama for six years.

The conditions are worse in the small towns, and, I am told, still worse in the large cities. The conditions of the poor whites in other sections of the state are not much, if any, better. These whites, however, are leaving the country to work in the cotton and other mills of the cities, where their condition may be somewhat improved by the

enforcement of the municipal regulations, although the crowding and poverty is not much relieved.

When the general prevalence of the tubercle bacillus is considered (and some pathologists report either healed or latent tubercular processes in over 90 per cent of all autopsies, and in Osler's *Modern Medicine* it is estimated that at one time or another during life 50 per cent of all people have had tuberculosis in some form) is it any wonder that the death rate among the colored population of the South is so high, and the death rate from all causes exceeds the birth rate? These conditions have brought about considerable discussion of the possibility of the extinction of the race on account of tuberculosis.

In looking over the field and being confronted with this situation (for I judge that conditions in Arkansas are not much better than in Alabama) I wonder that you had the courage to begin a campaign against tuberculosis. The campaign, however, is forced upon you from two standpoints—humanitarian and financial.

It is estimated by Fred L. Hoffman, statistician for the Prudential Life Insurance Company, that the net loss to the United States from this disease for one year is \$240,000,000.00. Distributing this loss according to the population, Arkansas loses more than \$2,500,000.00 a year. If, by any method of control, the number of deaths could be reduced one-half, the loss of \$1,250,000.00 could be saved to the state, and the suffering of humanity from this loathsome disease would be reduced one-half. In addition, the chances of infection to yourselves and your children would be greatly lessened.

The task before you, though great, does not appear so hopeless as the same task did for Dr. Biggs, of New York, who, with very little assistance, forced upon that city laws and regulations which are now recognized as models in the prophylaxis of tuberculosis.

Of all the measures directed towards its control, the first consideration is to locate those suffering with and dying from the disease. For two cardinal principles are laid down by all sanitarians—(1) destruction of the germ of infection, (2) increasing the resistance of the individual exposed to it.

It is, therefore, first necessary to pass laws and make regulations based on these laws that will insure, as completely as possible,

the registration of every death from the disease, and the notification of those suffering with it.

The registration of all deaths, from whatever cause, is the only course to pursue in order to succeed in getting those from tuberculosis. The subject of registration of mortality statistics is an old one, and perhaps nearly every state in the Union has some kind of law on the statute book relative to this subject, but the utter failure of most of them is shown by the report of the United States Census Bureau, which recognizes only fifteen states and the District of Columbia in its official reports.

For the purpose of aiding the enactment of satisfactory laws for the registration of vital statistics, a model of a law has been prepared by the Census Bureau which has been approved by the Committee of Demography and Statistics of the American Public Health Association, the Coöperating Committee of the Conference of State Boards of Health, through its chairman, the surgeon general of the United States Public Health and Marine Hospital Service, and the director of the census.

This form varies very little from the one approved by the Annual Conference on Medical Legislation of the American Medical Association and the Committee on Uniform Laws of the American Bar Association. The essential provisions of this model are very concisely set forth by Cressy L. Wilbur, M. D., United States Bureau of the Census.

I.—Deaths Must Be Registered Immediately • After Their Occurrence:

All deaths must be registered immediately after their occurrence in the jurisdiction in which they occur (city, town, village or township, or other primary division). By immediate registration is meant registration before the interment or removal of the body.

II.—Certificates of Death Should Be Required:

The primary record of a death should consist of a certificate of prescribed form, including, as a minimum requirement, all of the data necessary for the mortality statistics of the United States census.

III.—Burial or Removal Permits Are Essential for the Enforcement of the Law:

No dead bodies should be removed from the place of death, interred, cremated or oth-

erwise disposed of unless such action is authorized by burial or removal permit based upon a satisfactory certificate of death and signed by the local registrar.

IV.—Efficient Local Registrars Are Necessary:

There should be an efficient local registrar in each city, village, town or township, or other local political district, whose duty it should be to receive and approve certificates of death and to issue burial or removal permits for all deaths that occur in his jurisdiction. He should be properly compensated and should be required to enforce the law in his own district, under penalty for neglect. He should also be required to make returns to the central registration office, and the time and manner of making such returns should be expressly designated by law.

V.—The Responsibility for Reported Deaths to the Local Registrar Should Be Fixed:

The responsibility for obtaining and filing the original record of death with the local registrar should be fixed by the law. The best results are obtained when this duty is imposed on the undertaker or the person having charge of the interment, removal or other disposition of the body. He should therefore, be primarily responsible, under penalty for neglect, for presenting the certificate of death and obtaining the burial or removal permit before the body is disposed of. The attending physician, coroner, health officer or other official should be required to certify the cause of death and to furnish, upon demand, any other information that he may possess that is required to complete the record of the case. The personal data relating to the decedent may be supplied by any member of the family next of kin, landlord or person in charge of the premises on which the death occurred, and they and all other persons cognizant of the fact should be required to furnish such information to the undertaker, physician or other person preparing the returns. The name and address of the person furnishing the personal data should appear in the return.

VI.—The Central Registration Office Should Have Full Control of the Local Machinery, and Its Rules Should Have the Effect of Law:

The central registration office of the state should have direct supervision and control

of all matters relating to local registration. It should be charged with the maintenance of complete records and with the efficient and uniform enforcement of the law. To this end it should be able to command the assistance of the legal department of the state. It should also be empowered to remove inefficient or negligent local registrars and to appoint others in their stead; to prescribe, print and distribute the form of certificates and records for local use; to receive returns from local registrars, and to preserve the records in suitable order for convenient reference. The rules and regulations promulgated by the central office should be given the force and effect of law.

VII.—The Transmission and Preservation of Records Should Be Provided For:

A complete permanent record of each death should be kept in the office of the local registrar and in the central registration office, and provision should be made for indexing the records in strict alphabetical order. Returns should be made monthly to the central office, and within a certain specified period after the close of each month. This is necessary in order to enable the central office to ascertain the efficiency of local registration, and to scrutinize the certificates and secure corrections, if they are found defective, as soon as possible after the cases are reported. Returns should be made to the central office in one of two ways—(a) a copy of each record may be made by the local registrar, in which case the original record will be forwarded to the state office; (b) the original record may be retained by the local registrar, in which case a complete copy should be made in permanent form, certified by the local registrar and forwarded to the state office. The first mentioned method is considered preferable.

VIII.—Penalties Should Be Provided:

Penalties should be provided for violation of any of the provisions of the law. Each section should specify the penalties imposed, which should be based upon the importance of its requirements. It does not appear practicable to draft a complete law that will be equally applicable in all states, but it is believed that any law framed so as to include the essential features noted above will prove successful in operation.

The enactment of the model by the states makes for uniformity of reports, which is so

important to the national authorities. Every part of this model has been carefully worked out, and it would be very difficult to improve upon it.

Some states and municipalities may have different forms and regulations by which they set great store, but wherever they differ materially from this model they should be willing to concede the point in order to preserve uniformity, so that the records can be accepted by the Census Bureau collecting the statistics from all the states and the United States have a complete and satisfactory system of registration, as exists in other civilized countries.

This matter rests solely with the states. In our system of state government this function cannot properly be performed by the federal government.

There is one feature in it—the uniform death certificate—to which great importance should be attached, as it contains all the data required by the Census Bureau; and great care should be taken by the local registrar to see that it is complete.

The requirement that no dead body shall be buried or removed before the certificate is filed with the local registrar is a good check on prompt reporting, and is applicable in all cities and towns, but in sparsely settled country districts, where there are no undertakers, it cannot apply. In such cases it might be well to provide the same check by adding an additional clause to this section requiring all dealers in coffins to file the death certificate with the local registrar before he can sell a coffin to other than a licensed undertaker.

The law will not enforce itself, and, like everything human, has its imperfections and depends upon the ability and zeal of a great number of officers.

The ability of the local health officer or registrar is the pivotal point of the law. He is the important unit on which the future of the law and the future of the campaign against tuberculosis in the small towns and the country districts depends.

It is through this officer that the United States Public Health and Marine Hospital Service hopes to be of benefit to all the United States. This service has a bill before Congress to establish a school for health officers in the hygienic laboratory at Washington.

We all know how little of sanitary science and public hygiene is taught in the average

medical school. I believe the Harvard Medical School and the medical department of Columbia University, of New York, have provided a course for health officers and contemplate giving some public health degree.

The school for health officers contemplated by the U. S. P. H. and M. H. S. will be free for all duly appointed health officers and officers of the service. In this way state and national health officials will be brought together, and such a relationship will promote uniformity of methods and a greater degree of personal knowledge of local conditions as they exist in other sections than their own, and give each a greater respect for the ideas and abilities of their brother officers.

It is obvious that very little can be done unless the position of local or county health officer is made permanent for the appointee, for certainly he cannot attend to a private practice and continue an enthusiastic health official; for in the execution of the law he is bound at some time to incur the enmity of some of his neighbors. He should give his whole time to the office and have a salary sufficient to live on and a permanent appointment, subject, of course, to the efficient performance of his duties and good conduct.

With efficient health officers in every registration district of the state there should be no question as to the enforcement of the law relating to mortality statistics.

The next question for consideration is the notification of all persons suffering from tuberculosis; here more than ever the services of an efficient health officer are required, and without them very little can be accomplished.

All of these measures will require the expenditure of money, and nothing should be attempted unless you are ready to spend a considerable amount; but the amount will not be nearly so large as the amount saved by an efficient campaign against this and other diseases, all of which can be done with the same state machinery.

The consumptive has to be sought. He rarely comes to the doctor for an incipient case, and it is usually only after he has a moderately advanced or a far advanced case that he seeks medical advice. In such instances it is difficult to estimate how many he has exposed to his infection, and at this date the average time for an arrest, or an apparent cure, is two years or more, whereas the time of cure for incipient cases is much shorter and the expense much less.

The necessity for an early diagnosis cannot be too forcibly dwelt upon. In the collection of morbidity statistics of tuberculosis in addition to the requirement that all doctors report all their cases, the voluntary notification by individual should be stimulated by a small fee for each and every report.

These reports should be carefully guarded by the health official to prevent the persecution of the person reported, by patent medicine men, phthisiophobists, and others.

The houses should never be placarded, and as little publicity as possible should be given to the sufferer consistent with the efficient enforcement of sane healthy regulations.

In the search for the incipient cases members of families in the case reported should be examined, as this is a disease essentially of house infection. Do not wait for marked physical signs but where there is any suspicion of incipency use one of the tuberculin tests. The most positive is the subcutaneous injection of one of the tuberculin preparations, although a great many advocate the use of Calmette's ocular test, or v. Pirquet's cutaneous test. The efficiency of the last two are still sub judice, while the first is not without a certain amount of risk.

In this connection, I can do no better than quote from an article by Dr. W. A. Evans, of Chicago, on the early diagnosis of tuberculosis as a measure of control, especially the relation of tuberculin thereto, in which he states that the method employed in Chicago is three days' preliminary observation of pulse and temperature (8:00 a. m. to 12:00 m.), and late in the evening of the third day 4 mgm. of old tuberculin is given hypodermically. The pulse and temperature are taken every two hours during the next day.

A rise of temperature to 101.5 degrees Fahrenheit was held to be reaction. He concludes as follows:

"Weighing all of the factors, valuing the incidents of danger on the one hand and the increased curability and the decreased length of illness on the other—the possible harm, the probable gain, the weight of each—it is my judgement that no health officer with a conscience can fail to advocate the diagnostic use of tuberculin in the human subject."

The establishment of free dispensaries for the tubercular has been a great aid in finding cases while at the same time forwarding the work of control.

The inspection of mills, factories, prisons and crowded tenement districts for the sick

serve also the double purpose of finding the cases and instituting measures for control wherever required.

The medical inspection of the Black Belts of the southern states will reveal a large number of unreported cases. The inspection of the families where there is a discharged prisoner living and testing the members with tuberculin is a suggestion that is offered because of the large percentage of prisoners who have been sentenced for a period of a year or more returning to die with tuberculosis. At one time during my experience in Alabama such a sentence was equivalent to a sentence of death.

I recall in one instance where a negro boy was sentenced for stealing some article of small value (an overcoat, I believe). He returned after eleven months with a moderately advanced case and boarded in a family consisting of a man, wife and five girls. Today, only the man lives. All the others died in less than five years time with tuberculosis.

Medical inspection of schools is a common requirement in most of the large cities, but in the small cities, towns and country districts it is rarely, if ever, practised. It is useless to tell you that here is a fertile field for tuberculosis on account of the habits of children and their greater susceptibility to all infectious diseases. The necessity for investigation in this field is greater than in any other, for children are more frequently cured, in shorter time, and at less expense. Paris schools show 15 per cent of all.

Considering the number of years remaining to the child, the saving is worth more to the community than for the adult with the same moderately advanced case.

Then again, the field for education is better and results are more satisfactory, for the child is easier to teach than the adult, and the lesson of sanitation once learned lasts a lifetime.

In considering the collection of these statistics from the standpoint of present needs, the doctor tends to lose sight of the future requirements, but the statistician and the book-keepers of progress in sanitary work are in just as dire need of these in their work, for there is no other measure of progress or of benefits obtained. Then the public wants to know whether it is receiving full value for moneys expended. Unless we have these statistics we can prove nothing, and, to save ourselves from the slur that one can prove

anything with statistics, they must be accurate, and we must be able to demonstrate their completeness.

DISCUSSION.

Dr. Shibley: I would like just about two minutes to read you a paragraph from the report made by your tuberculosis committee. We sent out 11,000 circulars. A few physicians have asked me why they did not receive a copy. I must say that we did not have the money to pay postage; so we sent the 11,000 to the office of the superintendent of public instruction, who distributed a bundle to every county clerk in the state, with a request to give them wide publicity and circulation. I quote from the circular:

"That tuberculosis can be eradicated is the belief of those who have made most thorough study of the problem.

"But it is a task for many years and one that will require the united effort of the whole people guided by the most enlightened sanitary science. It is a problem touching the people in the sanitation of their homes, schools, churches, workshops, factories, hotels and public buildings and conveyances—in a word, wherever people live, labor, congregate or travel. The war against tuberculosis will embrace a wide range of objects. The following, however, are of immediate and urgent demand:

"First. To arouse the people from the lethargic sleep of many centuries. This is to be attempted by the formation of anti-tuberculosis associations in every community where practicable, and the widest dissemination by press, platform, pulpit and school of information concerning the nature and causes of tuberculosis and its prevention and cure.

"Second. Legislation providing for state, county and municipal health boards clothed with authority to cope with epidemic and endemic diseases; collection and recording of vital statistics relating to marriages, births and deaths and compulsory notification of contagious diseases, including tuberculosis.

"Third. The establishment of hospitals, dispensaries, camps and sanatoria, and the use of every available means for prevention and cure of tuberculosis."

Dr. Meek: I don't believe legislation will control it at all. I don't believe it is feasible in our state of society to compel a man who has tuberculosis infection to go about

the streets like a leper of olden time, crying out, "Unclean! Unclean!" The doctor who notified the proper authorities of all cases of infection that came under his observation would soon find himself very unpopular. One physician might do it and another would not. If they would all do it it might accomplish something. There is no redress against the delinquents. The proper thing to do is to educate the people. If there is a case of tuberculosis, educate them to care for the sputum and destroy it promptly. In legislation to protect them from expectorating on the streets, sidewalks or public places; that is as far as we can go. It would not be practicable to compel every doctor to go to the court house to advertise that certain patients of his are subject to tuberculosis. As to preventing marriage between two persons of tubercular diathesis, measures looking to this end seem more fanciful than practical. We are told by the very best authorities that tubercular infection is a matter of cultivation or inoculation; that it is hardly ever inherited directly. They merely *inherit* the predisposition, the weakened constitution or soil in which the tuberculosis germ may grow, which inheritance dwarfs the nutrition of the progeny of tubercular subjects, and in this way probably lessens their power of resistance. I don't believe we shall ever be able to control it by legislative enactment.

Dr. Vinsonhaler: I think there is just one lesson that ought to be carried home by every physician present, and that is the immense importance of using the tuberculin reaction. How many physicians among you can make a diagnosis of an incipient case of tuberculosis, where the symptoms are not manifest? Our plain duty to our patients and common honesty require that we should make some effort to find out exactly what the trouble is. I think the keynote of the doctor's paper is that every physician should endeavor to diagnose cases of this kind; should use the tuberculin reaction. I think that it ought to be popularized. I believe if we can carry out just that one idea from what we have heard it will do us all a great deal of good.

Dr. Lindsey: It is true that we have got to make a diagnosis of tuberculosis early—in the incipency. They say to make these diagnoses before you have any physical signs. Now, what doctor is there here who

can make them without physical signs? If there is no way to make them without you take the tuberculin and make the test, I think it will be very seldom, as scarcely any of you have it in your possession. Take, for instance, the incipency: Unless you make it by physical signs, it is impossible for you to do it. Not only the people, but the doctor, also must be taught first, to detect this condition in its incipency.

Dr. Walt: I do not think a patient can have tuberculosis without our finding it out. If we have pulmonary tuberculosis we shall find some condition in the lung which will justify diagnosis. Apply the tuberculin test. It is becoming more popular and familiar day by day. It has proven itself to be perfectly harmless and of decided advantage. I see no good reason, however, why we should not recognize the abnormal condition independent of the tuberculin test. There is always enough disturbance to make a reasonable diagnosis. I would rather make two mistakes in the right direction than one in the wrong. Where you have temperature that runs above normal in the evening and is subnormal in the morning, keeping it up for a good long time, with some induration of lung, with the general characteristics of conditions abnormal that are usually associated with this condition, I see no good reason why we should not be warranted in making a diagnosis of tuberculosis. These mistakes are in the right direction, because the patient is abnormal and needs correction; and we ought to be able to appreciate abnormality. When we wait until the microscope reveals the tubercle bacilli, we have waited until the symptoms are so pronounced that even a layman can make the diagnosis.

Dr. Warren: The success of our plans and the safety of the public depends entirely upon the report of the cases. If the doctor does not report his tubercular cases, then the health official cannot do anything. Everything hinges on that; and that is why it should be reported to the proper authorities. These reports must be carefully guarded by the health officer. No one else should be allowed to see them. That would be unfair to the tuberculosis victim and would make life miserable for him. He ought not to be placarded as a tubercular patient. Just report it; so that if the doctor will take upon himself to look after the case for everything except disinfection, the health officer need

not go see the case. No one else need ever to visit his patient; because it is reported and from that time on the doctor will become responsible for the case, and carry out fully all the prophylactic measures of preventing its spread to the other members of the family through association with the tubercular patient. If any case is so intimately associated in the workshop or in the factory as to subject every one there to exposure to his expectoration and the doctor does not report it, then it is almost criminal for him not to report it; because he is so liable to infect hundreds of others. I cannot understand why the doctor should object when he knows that it is a privileged question, so to speak, that the report is only to the health official and it is guarded. There is no report to any one except the health officer, and there is no danger of any one else but him knowing anything about the matter. For that reason, doctors ought to be compelled by law to make these reports, and fine them a sufficient sum for neglecting it, as to make it an inducement to do their duty.

As to the discovery and diagnosis: This is a question which has been debated all over the United States, and the general conclusion of every debate on the subject is not to wait for physical signs; not to wait for the after-noon fever; not to wait for the subnormal temperature in the morning. When you see a patient that shows the least indications, there is no doctor here, there is no doctor in the world that can always find tuberculosis lying dormant in these incipient cases. When the lung has a cavity and you can find it by physical signs, and you have fever, then the case has already gone far beyond what it ought ever to have been allowed to go.

Now as to the danger of the tuberculin test. Dr. Evans, at the last meeting of the A. M. A., challenged them to report any bad results. I believe Dr. Knoff said he had experienced some bad results; but in none of the cases could he attribute it directly to the tuberculin test. He had had a diffusion in one or two cases, I believe, and the patients had found no relief from it. But how can you say that that diffusion would not have taken place anyway? The mere fact that it does take place is not a good reason for attributing it to the tuberculin; nor that this particular change is due to it. While we admit that there may be some danger, the possible danger is nothing to be compared

to the good it will do to the world when properly applied. Don't wait for the physical signs, gentlemen. You cannot always find physical signs in the incipient cases. The only reliable test that we have today is the tuberculin test.

Just think of the expense to the individual after he has a moderately advanced case and got well. He has incurred the doctor's bill, increased expenditure by reason of change to the sanitarium, the change in method of living at home, outdoor work, and everything like that which covers a period of two years or more; whereas, if you take these incipient cases and treat them promptly an average of two or three months will cover the time to effect a cure.

There is another question: Does Arkansas want this law? Does she really want a law that compels the reporting of these vital statistics? It is up to the people. It is not the doctor's duty. The doctors can create a public sentiment, but the doctors cannot enact this law. They can create a public sentiment of such magnitude as will compel the lawmakers to enact it.

PRESENTATION OF TUBERCULOSIS PATIENTS.*

Drs. Sweatland and Walt, Little Rock.

Dr. Sweatland (opening)—Owing to the fact that the subject of tuberculosis has taken such prominence in Arkansas within the last year, especially since the introduction of the resolution at our last meeting, and more especially since our last legislature enacted a measure with reference to our tuberculosis sanatorium, Dr. Walt and myself thought as a matter of interest to us all it would be well to bring before you a few cases that we have been treating in the last two years—one of them three years—and go over the ground a little more, as we did two years ago at Little Rock with two cases which were presented at that time.

(Referring to patients.) This lady here was presented to the Arkansas Medical Society two years ago. You saw the report at that time in the Journal of the Arkansas Medical Society, and I think most of you received a separate report in addition. This

*Read before the Thirty-third Annual Session of the Arkansas Medical Society at Pine Bluff, May 18-21, 1909.

lady I saw in December, 1906. I had been treating her at the time that she came before this society, from September until May, when we held our meeting. The report has been given. I continued seeing her until the following December after our meeting, which was one year and two months—within a few days of a year and two months. Her condition when I first saw her was one of extreme emaciation. She was able to come to the office and to get upstairs with the help of her mother, but when she came into my office she was very much exhausted. Her temperature ran at that time 103 to 103.5 in the evening, and morning temperature below normal. As to physical examination, I do not know that it is necessary, as we have not any too much time this afternoon to enlarge upon this subject, and these patients all have to get away on the 5:10 train, so I will not go over the physical signs that existed at that time. You can all have them, as we have the data in a separate report, which you can get as you pass out.

In regard to this patient, then, it was about fourteen months, or fifteen at the outside, that she was under observation. A year ago last December or January she passed out of my observation, and I have not seen her until within the last week—last Saturday. During that time she has been following out, in a measure, the treatment, so far as eliminative processes are concerned, so far as eating and diet are concerned, as has been outlined in the report of two years ago. I will say here, just hastily, the condition was this: There is a cavity in one lung today; there is possibly a small one in the other, but there is no induration; there is no fever; there is no expectoration; there is no tubercular bacilli to be found in the sputum. That is the condition that we find by following out the treatment that has been outlined. She was in bed from the first of September until along the latter part of March, and it was in May that we had this lady before the society. She was a good patient, always easy to control, with one or two exceptions, consequently we were able to get results.

The next patient I have before you this afternoon is a gentleman I have had under observation one year and about twenty days. I think I saw him for the first time on April 30, a year ago. He was at that time in bed, with a temperature running in the evening to 104. There was induration of at least two-thirds of the right lung in the upper

portion and consolidation in the apex of the left. There is a cavity today in the right lung, and the left, so far as we have been able to ascertain by physical signs, has cleared up. The general condition in which I found him was one that at one time I would have thought was croupous pneumonia of the apices. We did not have any rusty sputum, but there was a profuse expectoration of rather a greenish yellow color and ratherropy. I took him to the hospital in about two days after I first saw him, and he remained there two or three weeks. He was in the hospital when our society met in Little Rock in the early part of May. He left the hospital about May 16 or 17, about the time the session of our society closed. The physical signs were as I have stated—that is, to all intents and purposes. At the end of two weeks the consolidation or induration had cleared up to a remarkable degree. The temperature had not been rising to more than 101 at the highest point at that time. He was very anxious to get away, and in a few days the temperature had dropped lower and I let him go to Memphis to get his family and move them to Little Rock. He is a stationary engineer, and, with the exception of about ten days before he returned and resumed his work, he has not lost a day from work since. We have here today as physical signs a cavity. We are not able to find tubercle bacilli any more. The sputum, and, in fact, the cough, has cleared up. The man has been able to stay at his work and earn a living for a good large family of girls all this time. It will be one year in about a week now.

The next I shall present is a lady I have been observing since two years ago last March. I was called to see her and noted what her condition was. I found her with a very serious cough. She advised me that she had lost considerable in weight—the actual number of pounds I don't remember. Temperature at that time was 105. The physical signs that the lungs gave did not indicate that the temperature should be so high. It was not an acute pneumonia. There was in the upper portion of the right lung consolidation, but it was not of that character that I thought was acute pneumonia. The next day this patient broke out profusely with measles, but was in bed only about two days, because the whole family had contracted measles and she had a daughter who was very ill, and her attention was so much need-

ed that she was compelled to get up and be about. Now, as we got straightened out and the little ones got better and the sickness in the family was over, and she was getting over the effects of the measles, I examined her sputum and found tubercle bacilli in it. The cavity can be found today, but the tubercular bacilli have disappeared. There is not an induration in any one of the three patients I have spoken of. There can be found, on baring the chest of the first patient I exhibited, and examining the various portions of the chest, some respiratory sound, but as for any signs of induration, there are none.

We have gone along in this way. This last lady I spoke of has been able to take care of her household and perform her family engagements, and has not been in bed since that time. Her temperature after the measles never went above 100, so far as I have been able to find; $99\frac{1}{2}$ has been the highest her temperature has been running.

The general treatment is about as outlined, approximately, in the first case I have given. Of course, various changes have to be made from time to time, and the treatment modified to meet the requirements of the patient.

Dr. Walt—Yesterday, while I was away from home, my friend Dr. Sweatland took a very unfair advantage of me by carrying one of the best examples of the good results from our treatment out to the hospital and removing his appendix. He was the young man I exhibited before this society last year. He was brought to Little Rock on the 5th of March that year from his home, 200 miles distant. He had suffered an attack of pneumonia. His temperature was running to 101 and 103. Left lung almost entirely indurated; considerable expectoration. I also found expansion of the left lung prevented by adhesions of the pleura and some little induration of the middle lobe of the right lung, and tubercular bacilli in the sputum. I presented him before the annual meeting of the society at Little Rock on the 17th day of May of that year, but he was in a very weak condition. I had the pleasure and the good fortune of having Dr. Browning, of California, who has had quite an extensive experience in the treatment of tuberculosis, to see the patient with me and present the patient to the state society.

Now, the reason I asked Dr. Browning to examine him was that I wished to show him that we can get better results by treat-

ment and proper care of the patient than climate, good food and rest can do. I asked him how long it would take him to have that class of patient back at his work. He said it would take two years. My man went back to work in less than sixty days, and has been at work ever since, with the exception of ten days, when I sent him to the hospital to rest up for recuperative purposes. Night before last he had fever, and Dr. Sweatland was called out to see him, and yesterday at 1:00 o'clock he removed his appendix. He is doing very nicely today. His condition is good and promises well. Notwithstanding these extreme conditions, he has done well and is running as mail clerk between Little Rock and Alexandria, La.

While I have two patients, and they have not been cured absolutely, I have two of the most beautiful illustrations so far as the points we should strive actively to recognize are concerned.

The first patient is a lady who waited upon her husband for over two years. She was his main nurse. He died with pulmonary tuberculosis. I knew that she was not well while treating her husband, but she considered it her duty and believed it was necessary that she wait on him. She has had temperature ever since, sometimes ranging as high as 100. I first began treating her in December; that makes five months' treatment. Temperature now rarely ever goes above $99\frac{3}{4}$, and that is only when we have some strain upon the organism, such as too much exertion, too little elimination, too much nutrition, or some condition that interferes with the waste and repair.

The other lady, who sits just in the rear of this one, has a history very similar. For three years she was main nurse with her sister, who died with tuberculosis pulmonalis. Her temperature has not been high at any time; only once it has reached 100. But for some time her temperature has been above normal. It has been below normal in the mornings. She has had three hemorrhages—one since we have been treating her, two before. Indurated condition in the apex of the upper lobe was very marked. There is still some induration there, but she is improving right along—doing nicely; general condition growing better daily, and she is showing marked gains all along the line.

We have selected these few cases out of a class of nine—Mrs. G. N., Mrs. M. V., Mrs. C., Miss H. and Miss A. Mrs. A. was another one

of a class, and Miss H. one I spoke of, and Mrs. J. W., who was in a chronic condition in 1907 and has been under our treatment since that time.

I wanted to show these two patients, because there are six or seven others in the same class that are doing just the same—improving in a uniform way; getting along about as well as the other class, and all considered as chronic when they began the course of treatment. I thought it would be of interest to show that class as well as the others. There are variations of temperature and general physical conditions. We did not get any tubercular bacilli, and we don't think it is necessary to wait until we do get them. Because we have no destruction of tissue, we believe it necessary to be on the alert. We ought to be able to protect and care for them and not let them get to that point. I also want to emphasize the fact that no climate, however salubrious, excessive food and abundant rest can do as much for the patient as the physician can.

DISCUSSION.

Dr. Warren (Black Rock)—I have been very much interested in listening to these reports and seeing these cases. About seven or eight years ago, before our county medical society in my own state, I made the statement as the result of my experience that half of the tubercular cases would get well if properly treated, with proper surroundings. Some of my brother practitioners doubted the accuracy of my conclusions and called me down on the assertion, but I assured them that such had been my experience. About two years later I was in the Chestnut Street clinic of the Jefferson Medical College, Philadelphia. They had quite a number of these cases to come in. I made the statement to the doctor in charge. He said, "I believe that more than half of them get well." I want to say to the members of this society that I believe that out of probably fifty patients that I have treated for pulmonary tuberculosis, half of them have recovered and are, so far as I can tell, well and strong and able to be about their vocations after having had from three months to a year of treatment.

I have now under my care six, I believe, ranging all the way from tubercular sinuses down to incipient tuberculosis.

Just here I wish to say that I believe that 2 per cent formalin solution as recommended

by Dr. Murphy and his staff is of virtue for injecting these old tubercular sinuses. I have been using it, but I am not able to report any recoveries—only improvements. The most efficacious treatment that I know of is abundance of fresh air, good, nourishing food, and procedure along the line directed by Dr. Norman Bridges of California.

Dr. Sweatland (closing)—I wish to state that I believe that tuberculosis can be cured if we will get at it right, go after it, get down to business, and not overlook our hand, which we are very apt to do. It is not difficult to diagnose early cases of tuberculosis. You ought to be able to do that very readily; you ought to anticipate; don't wait till you find tubercle bacilli there; that is all wrong, because when you wait for the tubercle bacilli you have waited too long. It is too late to begin your treatment. If you have induration in the apex of one lung and another induration over in the other, and you find pneumonia, what else have you got? It is there waiting for you. Go after it then and there. Treat it and treat it vigorously; treat it then; don't wait for a microscopical examination to verify your diagnosis, because if you wait until then you wait until it is too late. Each one of these cases here, we never expected to be able to do anything for them. We did not think we could do one thing for them. Especially is this true of the first case I presented to you two years ago. I told you then, and I say it again now. She was not well then, nor is she well now. But hers was an extreme case—much more advanced than any of these other cases. It was more chronic; that is the reason. She is going to get well, and she is going to get well without very much more assistance—only look after her diet and proper elimination; that is about all. She don't want to eat too much. Don't feed your tuberculosis patients any more than they can take care of. Some of them cannot take care of as much as a typhoid fever patient. This idea of stuffing is all wrong. Dr. Turek told us that two years ago, when we presented these cases to him. I had been feeding one of them too much and came near losing her. It is all wrong to stuff these patients. How in the world can a patient who has temperature and who is generally weakened and enervated take care of more food than there is nerve power to make the cells utilize? There is not very much food needed, because the patient is enervated and cannot take care of

much. The nerve power is not able to come up and take care of a large amount of food, excrete the waste and get rid of it.

In the first place, we must not forget the fact that we can cure tuberculosis in Arkansas as well as it can be done anywhere else in the world. I believe we can do it a great deal better than in most other places. Arkansas is peculiarly adapted for the treatment of tuberculosis cases. The only thing is this: We do not want to wait and start in with a pulse that is running wild and weak—no stability to it; both lungs with a hole in them; general systemic poisoning and lowered nerve power and weakened vitality. Not that; we do not want to wait until then. We want to get them in the beginning, when the first insinuation of something wrong occurs, and then if we all fall in line and labor heroically we can cure them. There is no trouble in doing that. The only time when we might have trouble is where we have it in connection with syphilitic disease.

Dr. Walt—I simply want to emphasize the fact that we should get to these cases early. I believe it is possible to take care of those who are predisposed by physical condition and prevent them from having it. I believe it is possible for a man to live anywhere with proper care and not contract tuberculosis. I don't think it is necessary for us to wait when we have an abnormal relation which decidedly asserts itself. Let's not attempt to cover it up with malaria until the broken-down cell carries the bacilli to the microscope. We should at least recognize the condition and try to get the patient normal. We certainly ought to be able to appreciate enough difference between normal and abnormal relations when the patient has developed fever to make a diagnosis.

In regard to the treatment, with your permission I will simply reiterate the suggestions on treatment given in our paper before the society last year, which was to keep the blood stream as free from waste as possible by elimination through the various glands of exit, keeping in the circulation the various elementary substances of which the body is composed.

In every direction the process of cell building and cell repairing is going on, throwing off the waste and replacing it with new. It is upon that line of suggestion that we are to care for these people. I think we ought to stop the habit of sending our patients so far away for climate alone. I don't believe

that any climate in the world, or any place on the face of the globe, no matter what its altitude may be or whatever the clearness and purity of its atmosphere, for which it may be celebrated, I cannot conceive how these alone can do as much for our patients as we can accomplish by painstaking care and perseverance that is demanded to meet requirements.

NOTES ON THE PREVENTION OF DISEASE.*

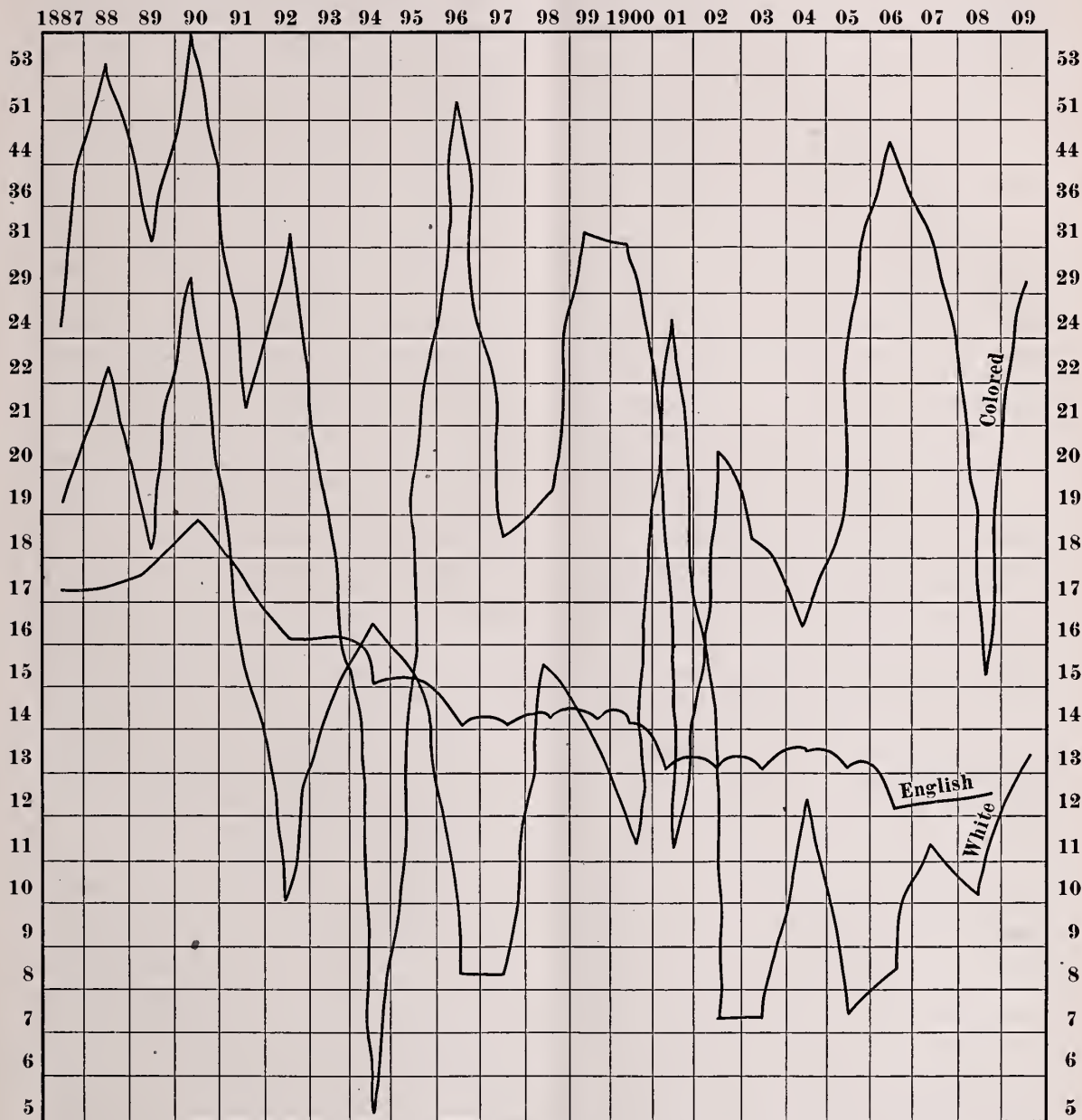
E. G. Epler, M. D., Fort Smith.

It seems that in heathen China the physician is engaged and paid to ward off disease from his client. In case of sickness and death ensuing, the unsuccessful practitioner has paid the penalty for his failure with his life. So a high respect in that benighted land is had for the principle so truthfully expressed in the old saying, "An ounce of prevention is worth a pound of cure." In civilized countries, too, preventive medicine is appreciated more and more, though people have been wonderfully slow to profit by the teachings of our profession in this respect. However much we may glory in the erudition of the physician and in his proficiency in the diagnosis of disease; however great our regard for the excellence of our advanced ophthalmologists, obstetricians and other specialists and the general surgeon, in no department of the science and art of medicine and surgery have such successful and positive results been obtained as in the various means and methods of preventing disease. Today we practically do not know typhus fever, scurvy—the dread affections that formerly destroyed many thousands annually. The plague, as experienced in past ages, is unfelt now. Leprosy is a great rarity. Smallpox has been robbed of its horrors. A severe epidemic of typhoid fever today is a disgrace to any community, and speaks much for the lack of intelligence and common sense of those afflicted. Diphtheria, once so dreaded, is now well under the control of the alert physician. Puerperal fever is regarded as a most grievous occurrence, and if one is so unfortunate as to have such a case, whether at fault or not in his management, he will be roundly blamed. The way to prevent yellow fever and the various types

*Read before the Tenth Councilor District Medical Society, Fort Smith, March 5, 1910.

of malarial fevers has been indicated to us by the results of wearisome experiments, long observations, even at the expense of valued lives. Though you and I may not have a prominent part in some movement that may prove greatly beneficial in stamping out a dreadful malady and thereby bless

rattle a vial of gallstones for the edification of a sufferer from bilious colic, yet each of us, in his own circle, may accomplish most excellent results in prevention of disease in ways that seem commonplace enough, and, sad to say, too often neglected, possibly for this very reason.



Mortality per 10,500 population from tuberculosis of English, 1887 to 1906; white and colored of Fort Smith, Ark., 1887 to 1909, inclusive.

thousands of men; though we may not have the pleasure of displaying before the eyes of a prospective patient in a spectacular way a gangrenous appendix successfully removed and well preserved for such a purpose, or

As we look around us and behold our own clientele or read of the experience of others, we should be shocked at the amount of suffering among old and young, rich and poor, male and female, from venereal dis-

eases—strictly preventable affections. We are not much shocked, though, as we have become case-hardened and indifferent. Yet there can hardly be a greater misfortune than to be thus affected. There seems no end to the misery entailed upon one and his immediate connections from such diseases. A man prominent in one of our medical schools as a teacher has said that no man reaches his majority without an attack of the clap. Even in our own county medical society such a statement has been gravely made. It is said that at the University of Berlin fully three-fourths of the students have been infected. In Munich, in probably the best medical clinic in Europe, Prof. Mueller took half an hour to speak of the prevalence of syphilis and gonorrhea, and urged young men and women to lead strictly moral lives, to thus protect themselves and friends from the contamination of these loathsome and filthy diseases. In his own service, about 350 beds, 7 per cent of cases were venereal and 35 per cent were tubercular. The lecture was heard with close attention. It is said in Munich that fully one-fourth of the births are illegitimate, and another fourth would have been so had not hastened marriages given a semblance of respectability to those occurrences. At the general hospital in Vienna I watched for hours a long line of men and women coming for specific treatment. One and then another medical attendant waited upon the crowd, each becoming tired with the work and retiring as a fresh relay came on duty. This was in a country where so-called regulation of prostitution has been most earnestly conducted, where sexual lust is given free play and immorality is at a premium. In other lands grievous damage has resulted to the people at large from almost unlimited promiscuous sexual intercourse—the great and only means of spreading widely venereal disease. In France the race is actually dying out. This condition prevails to such an extent that young men to fill the ranks of the army are not to be found. The plan to enroll African negroes has been gravely discussed, but as yet rejected. In this land of lax morals, often a man has one or more mistresses. It is said he may introduce such creatures to his legal wife with impunity. It is also said that unless a wife has attractions enough to win the love of men other than the husband he does not think much of her, but, on the other hand, may rejoice if she is successful in toying with others—so low, in-

deed, is the respect for the sexual act in these particular countries. In our own land sexual intercourse out of wedlock is generally condemned as mean and criminal. To take away the virginity of a maid, no matter by what means, is so atrocious it becomes the duty of some near relative of the injured one to kill the seducer; yet a young man is supposed to sow wild oats, and, incidentally, to reap the harvest, such as it may be. Such conduct is expected and excused because of the very passionate nature or tendency possessed by him. Indeed, one unable, or, rather, unwilling to subdue such natural inclinations is to be pitied for his weakness rather than condemned, as some seem to believe. Though a man may be known as grossly loose in his conduct, he is not necessarily barred from what is called good society. A girl or woman once proclaimed to be lewd has a sorry prospect in this life. In the olden times a woman taken in the act of adultery was stoned to death. Today the remark, "She is no longer nice," is full of meaning and most damning. Grossly ignorant, perverse in her conduct, and knowing more than her elders, many a girl becomes the victim to her own sexual lusting and that of some male. For her, though, there seems to be no pity—no excuse. For a while, at least, a certain degree of moral infirmity renders an otherwise common appearing female attractive to some people; so much so she may glory in the number of admirers on her trail much as a slut in heat attracting a bunch of curs. Such is the way of the world. By reason of this lax observance of the moral law, as we know it, both from human and divine sources, even in our own land immorality prevails to a grievous extent. In consequence thereof venereal diseases are spread by means of promiscuous sexual intercourse, to the great injury of hundreds of thousands of men and women annually and serious physical ills are entailed upon many of their offspring. It is impossible to picture correctly the extent of human woe, humiliation, and the sad wreck of that which is most dear to our fellow-citizens arising from this condition. The evil is known to be so great it is almost beyond control. Too often our elders, giving away to the natural tendency of sexual desire, weakly say it is useless to attempt such control of one's self. The young must find out for themselves the evils of immoral conduct. Those most able to curb the passions of youth fail to act. In place of timely in-

formation to the boy or girl at the age of puberty, regulation of prostitution has been accepted as the means of curing the ills incident to promiscuous sexual congress. The idea thus fostered, that such intercourse is natural, is indulged in by most men, and is quite safe in the public brothel where the whores are examined from time to time as to their fitness or unfitness for this function, has led man after man astray when his moral tendency and good sense, if left untrammelled, might have enabled him to withstand such allurements. To my mind this matter of regulation of prostitution fails miserably to prevent the spread of venereal diseases. The cause of the trouble must be attacked at some other point than the whore house. Every child, male or female, when about to reach the age of puberty, should have instruction as to their sexual organs, the tendencies of their desires, the harm from unlawful indulgence, the nature of the several venereal diseases and the sad and inevitable consequences of such infections. Every youth should know that promiscuous sexual intercourse is not essential to his well-being—rather that it is damning in its effects, and that, however sorely tried, he or she should restrain themselves. We have an excellent example of the results of such education in early life in the conditions of the Jewish girls and women. The Jewess knows from early girlhood that her noblest function is an honorable maternity. She is taught to abhor immoral conduct. She looks forward with pleasure to the time when, in purity and cleanliness, she may gratify her natural desires without shock to her modesty or harm to her moral nature. She generally marries at an early age. However low in their moral nature Jewish men may be, it must be said that Jewish women are morally clean to a proverbial degree. Indeed, a Jewish whore is seldom seen.

In a similar manner we might hope to so impress upon the youthful mind, that all would have just respect for the sexual act and would conduct themselves according to the moral law strictly. Then we might hope that venereal diseases would be banished. Not until society rises to a higher standard of morals may we look for relief from the widespread disasters incident to this class of diseases. The physician, in his close relation to the father and mother, the girl and boy, may do a world of good by timely and discreet advice—which should be, first, last,

and all the time, abstinence from illicit sexual intercourse. Much may be said as to the diseases incident to the use of alcohol. Uremia due to the prolonged, though moderate, use of alcohol as a lethal condition is common enough. Again, what a world of trouble is earned for one's self in the way of stomach diseases when, for his stomach's sake, a man is accustomed to take a morning draught or an evening cocktail. More especially are the higher functions of the brain affected by this foolish practice. What sad havoc is wrought in the blood vessels and heart by alcohol, however lightly indulged in, if prolonged. The disease-producing effect of alcohol was most vividly impressed on me in my observations in the pathological institute in Munich, where recently I had the opportunity to see over 300 sections made in a careful manner. In this part of Germany especially are the lighter alcoholics freely and commonly used by all classes. In the seven months of my stay in that town of easy-going, pleasure-loving people did I see but very few drunken men on the streets. Even during the great festival season from Christmas to Ash Wednesday, when nearly all give themselves up to carousing, dancing and sporting generally, drunkenness was seldom observed. Yet in the postmortem sections seen it was plainly evident that alcohol had played a prominent part in disorganizing the vital parts of many a man and woman. Diseases of the heart, blood vessels, liver, kidneys and stomach, as well as of the brain, bespoke the harmfulness of alcohol, even when moderately used. We might take into account the effect of this agent when taken in excess, as is the case so often in our own country and England. In Fort Smith every year are recorded many deaths from acute alcoholism. In England spirit drinking is the main cause of much distress from poverty, lack of employment and sickness. I happened to read in a daily paper of Liverpool a statement of the results of the collective investigations of a certain society as to the effect of alcohol upon the people at large. Eighty per cent of crime and 60 per cent of pauperism were ascribed directly to spirit drinking. The London cockney, as he is called, is a poor hand, and is not wanted where earnest effort is required, and mostly because of the effects of spirit drinking. So great and deleterious an effect has the daily use of milder alcoholics had upon the German nation as a people that the daily press has

taken up the cause of abstinence from intoxicants in a vigorous manner. It seems the press was incited to this action by the woeful lack of endurance in contests of physical strength shown by German representatives as compared with those of other nations. "Why is this?" was the inquiry. The answer was that the fatty heart induced by the use of beer and other mild alcoholics disabled the men. In our own Southland the cause of temperance is growing wonderfully strong as our people appreciate more and more the damage done by spirit drinking in the way of inducing disease. It is impossible to estimate in percentages the harm done to the minds and bodies of drinkers by alcohol. We can say it is enormous.

To abate this cause of sickness is a great duty on the part of the medical profession. They are the great and influential teachers of mankind as regards the care of the human body. Their sayings are thought over and over most seriously by all persons. Their own conduct is closely observed. Their example is followed often. An unwise word, an act of folly on the part of one of our fraternity, may lead to crime or illness by inducing some confiding, admiring follower to pursue the same evil course. On the other hand, a timely word of caution or friendly advice may check a downward course and build up a good character. If the ill incident to the use of intoxicants with those due to illicit sexual intercourse could be lessened by medical men to a great degree, more good would be accomplished for the human race than by the checking of any great epidemic of cholera or typhoid fever.

Unfortunately, the baneful effects of these universal causes of disease do not cease with the deaths of the immediate victims, but continue their action upon the members of succeeding generations. Suffice it to say that the great majority of children debilitated from hereditary taint owe their miserable condition to alcohol or syphilis. It is self-evident that to save such unfortunates from sickness and to build up a natural resistance to diseases of all kinds we must induce would-be parents to lead abstemious, moral lives.

These considerations naturally lead us to consider the great duty incumbent upon the practitioner to watch over the care and feeding of the babies in their homes, and later to supervise their lives during the schooling period and the critical age of puberty. By active, wholesome supervision of the chil-

dren of today the men and women of tomorrow will grow to be vigorous, moral, and in every way better citizens. One cannot say just what might be said and done by the physician at the schools, on the playgrounds or in the homes of the families he practices for. Good hygiene in every detail of human life should be sought for and attained. What a field for the intelligent doctor to use his influence in! How sadly is this field neglected!

By thus promoting the well-being of the rising generation and those yet to come, the duty of the physician to prevent sickness by the proper care of cases of infectious disease and the immunization of the people generally would be rendered far easier of fulfillment.

This last mentioned obligation upon the physician to check the spread of prevailing infectious diseases receives more earnest consideration than the phases of the question of prevention of sickness that I have been considering, as the dangers therefrom to mankind are more imminent and more greatly feared. The results of well-directed efforts in these particulars are appreciated better by the people at large. It is true that the great success of our profession in allaying sickness by preventive measures has brought us the greatest satisfaction and glory in late years.

See what distinction the Japanese have won for themselves and for Japan by preventing disease among their troops in the Russian war. However great the renown of the army by reason of martial valor, energy and victorious battling may have been, the success of the medical service was even more remarkable. Morbidity and mortality were reduced to a great degree below that of the Russians. Their efforts were gloriously successful as compared with the miserable results obtained by the English in the Boer war and by the Americans in the Cuban war. In the latter, grave disaster attended the assembling of our troops at various points. Had the Spanish held out a few days longer at Santiago, sickness would have vanquished our forces for them. The grave misfortunes spoken of seem to have resulted from mismanagement and an inexplicable, pigheaded indifference on the part of the officers of the line to the advice and prayers of the medical arm of the service. So different was the conduct of the Japanese!

November 9 last, at the Academy of Medicine, Paris, Dr. Loewenthal compared the

mortality records of the German and French armies. He thereby exemplified the thoroughness that characterizes the German. His pre-eminence in science, in manufacturing—in fact, wherever he applies his hand and mind—is due in a great measure to this excellent quality. Like the Japanese, the Germans labor not only for their individual gain, but for the benefit of the fatherland. The great success of anyone is rejoiced in as a great achievement. Koch's great work brought honor to the entire nation. "Hoch Zeppelin!" resounded through all Germany when the count succeeded so well in aerial navigation. His victory was for Germany. All shouted wildly as he sailed over their heads. All mourned sadly when some accident befell him. It was a German calamity. So it is in the medical service of the army. Each officer strives to obtain the greatest possible success for the nation's benefit and glory. In turn, the state gives abundantly to promote earnest efforts. The French, more volatile, more showy, perhaps, but less thorough than their great rival and neighbor, suffer in comparison as regards the maintenance of health in the army. Thus, from 1902 to 1906 the army in Paris—45,000 in number—suffered three and one-half times as many deaths from tuberculosis, three and one-half times as many from influenza, twice as many from dysentery, as the German force in Berlin, 65,000 men. The mortality of the entire German army was $10\frac{1}{2}$ per cent less than that of the French army. In the French army there were 221,000 more cases of sickness and 3,600 more deaths from infectious diseases in five years than in the German army, though the latter had 70,000 more men. Bad sanitation was held to be the cause of this excessive morbidity and mortality in the French army. The Germans had been thorough in their measures to prevent sickness, to their great profit and renown.

In these national achievements they glory as no other nation. They honor their fellow-citizens who may have attained success in any branch of science and art, thus stimulating one another to greater and greater efforts. A year ago I stood among a throng of citizens of Munich in a central park one Sunday morning to view the unveiling of a marble monument and statue erected to the memory of the great Bavarian physician, Pettenkofer. Professional men of all kinds, the nobility, bankers, merchants, soldiers and laboring men had assembled to do honor to

their one-time fellow-citizen. Now facing one another, about ten rods apart, stand two monuments and statues, one of the great chemist and philanthropist, Liebig, who did so much in the improvement of foods for children and the sick; the other of Pettenkofer, who for his part had succeeded in making Munich a healthy city. Formerly Munich had been racked by epidemics of typhoid fever and enteric diseases. Pettenkofer made many experiments and showed that the city water was so foul it was to blame for the conditions prevailing. Through his efforts a new supply of water was obtained from the mountains some sixteen miles away and carried to retaining reservoirs, whence it was distributed as needed. The watershed was controlled by the city, and most zealously guarded. Now typhoid fever has mostly disappeared. The city seems safe from water-borne diseases. Among the hundreds of post-mortem sections I saw there, only two revealed evidence of typhoid fever. In the great medical clinic of Prof. Mueller only one case was exhibited in many months. Pettenkofer's work had been well done and ably seconded in all particulars by the city government. The benefit was great. His fellow-citizens rejoiced in his achievements and gave him honor.

In our own country equal success has been attained. Thus our confreres have made possible the building of the Panama Canal by robbing yellow fever and those of a malarial type, as well as typhoid fever, of their terrors. Otherwise probably this great work could never be accomplished. Today, to our shame, the widow of one of the efficient and earnest medical men laboring for this purpose, whose life was sacrificed for the common cause, waits in vain the action of Congress to grant her a pension as an acknowledgment of her husband's service to the country and to the world. A sad lack of appreciation on the part of our rulers of such work, as to its importance and the inestimable value of the results achieved. There are other evidences of absolute indifference on the part of many really intelligent citizens as to matters pertaining to public health. Chicago for many years suffered from endemic typhoid fever. Blind to her danger, this city polluted her water supply continually. The citizens of Philadelphia likewise were forced to use disease-breeding water. Hundreds of deaths from typhoid fever were the annual sacrifice to this folly. In 1906

a sand filtration plant was installed, and that part of the city known as West Philadelphia was supplied with good water. The death rate from typhoid fever fell 98 per cent immediately. The cost of collecting, purifying and distributing this water was stated as \$15.00 per million gallons.

At Cornell University a few years ago typhoid fever became so severe the school was closed. All lost a valuable year's time and much financially. A number of fatalities occurred, and many were seriously ill. The management had said the students had not become acclimated; nothing more. Nothing was done until an enormous sacrifice had been incurred. Then, too late, were the eyes of the unfortunate faculty opened to the real condition—the water was polluted.

At our own state insane asylum a herd of tubercular cattle were continually used a year or more after being pronounced infected. It was expensive; it would cost something to replace the diseased animals with healthy ones.

In Fort Smith the same apathy as to public health is exhibited by many who should know better and do better. Our sewer commission would have the sewerage of the reserve section carried direct to Poteau River to a point near the intake pipe of the water system if not restrained by the mayor and the Board of Health. The town of Poteau, thirty miles above us, drains its sewage into this river. The towns of Huntington, Hackett and Bonanza, with the intervening country, contaminate the water of the branches of Poteau River by their drainage. As is well known, each town has many cases of typhoid fever annually. Our city water is but poorly clarified. Fortunately, as yet typhoid fever arising in Fort Smith is quite rare. For the last three years the total number of fatalities from this affection were, respectively, fourteen, ten and fourteen. True and gratifying as this is, we do not know what month a serious epidemic may break out. No effort is being made to improve our city water and anticipate the possibility of such a calamity. As has been the case in Chicago, Philadelphia, and at Cornell, must we wait until the emergency is upon us before intelligent action is taken? We are sorely in need of German appreciation of work of this kind and of German thoroughness in the management of matters pertaining to public health.

Much has been said regarding the great

white plague, and earnest efforts are being made to improve existing conditions here. The struggle is a hard one. As yet public interest is scarcely aroused. There is one ordinance that has been enacted and enforced, somewhat—the antisputting ordinance of our Mr. Dooley, of the First ward. This is all that has been accomplished so far, I believe. Yet last year 12½ per cent of all deaths were ascribed to this disease, tuberculosis—a strictly preventable disease. This is a fact proven by the authentic reports of one of the greatest consumption hospitals in the world, the Brompton of London, that no occurrence of this affection has developed among the attendants or doctors, though thousands of cases are handled there annually. Dr. Flick, of the Henry Phipps Institute of Philadelphia, has assured me personally that where visiting nurses have labored in the poorer sections of Philadelphia the morbidity and mortality from this disease have diminished materially. Under Dr. Biggs the mortality in New York has declined greatly—from 36 to 24 per 10,000 of the population since 1887. View this chart which I have prepared. See what England has accomplished under unfavorable climatic and social conditions. Sixty years ago the mortality from tuberculosis was 25 per cent of all deaths; now it is but 10 per cent. One line on the chart indicates the mortality from consumption per 10,000 living in England since 1887. Note the gradual decline that has resulted from the earnest efforts of her citizens. If their success in the future is as great, by the year 1944 there will be no mortality from this shortage. Another line on the chart shows the mortality per 10,000 population among our colored people from 1887 to 1909, inclusive. The third line shows the mortality among the whites per 10,000 population for the same time. The per cent of deaths from consumption among the colored people is 15; that of the whites is but 10. That is, the rate among the colored is 50 per cent greater than that for the whites. This is not peculiar to Fort Smith. At Charleston, S. C., the rate for the whites per 10,000 population is 33.54; for the colored people, 68.65. At New York, for the whites, the rate is 37.96; for the colored, 84.52 per 10,000 population. Considering that many of the negroes are servants, washerwomen and nurses, they have excellent opportunity to spread the infection among their employers. The disease is due to a living

specific entity, the tubercular bacillus, which may be conveyed in several ways from one to another. Indeed, in no other manner may consumption develop except by the carrying of the germ by one affected to another susceptible to it. No effort is being made to alter the mode of living of these people or others that may favor the spread of consumption. Nothing is done to isolate the infected. The request of the Board of Health to notify them of the occurrence of such cases, so that information regarding the nature of the disease and the best way to care for such a patient might be given the family is coolly ignored. We learn that fully 80 per cent of early and favorable cases of consumption are being cured at a number of places, as Asheville, N. C.; Saranac Lake, N. Y.; Henry Phipps Institute, Philadelphia; Munich, London and Glasgow. Now, however desirable it is to cure consumption, it is far better and more sensible to prevent its occurrence. This may be done in Fort Smith as well as in New York, Philadelphia and elsewhere. With a little expense, a little encouragement of the local physicians and of the Board of Health, great benefit will ensue promptly. Considering our favorable climate and surroundings, we should have far better results in a short time than England has had. We might wipe the disease out entirely.

To summarize: When venereal diseases are abated, when the evil effects of alcoholic drinks are done away with by abstinence from their use, when our children are born and raised in healthy surroundings, when our food and water are pure and wholesome, when the dangers from infectious diseases, as typhoid fever and tuberculosis, are reduced to a minimum by reasonable measures, then we will accomplish what our knowledge and experience warrant us to expect. As things are, I fear me that if the old Chinese custom of killing the practitioner unsuccessful in preventing illness were in vogue now, we physicians would all soon be dead men.

CLINICAL REPORT OF A CASE—REMOVAL OF A GRAIN OF CORN FROM THE ENTRANCE OF THE LEFT BRONCHUS OF A CHILD FOUR YEARS OLD.

R. H. T. Mann, M. D., Texarkana.

Mr. A. J. C., with his child, four years old, was brought to me by his family physician,

Dr. J. H. Taylor, of Cookville, Texas, on the 2d of April. The doctor stated that the child, while playing, had put some corn in his mouth, and during the act of laughing had sucked a grain of this corn into its trachea. When I examined him his breathing was good for such a history. An examination of the chest, however, revealed that there was an obstruction low down, but it seemed to be more to the right than to the left side. The child's condition was remarkably good, considering the fact that the corn had already remained in its present position for two days.

I decided to do a tracheotomy, and, after the method of Killian, see if I could not remove this grain of corn. The child was taken to the hospital, and, with the assistants, Drs. Klein and Hunt, the operation was undertaken. The child was anesthetized and a tracheotomy performed without difficulty. The opening in the trachea was made a little larger than usual, so as to admit of the easy introduction of the Killian bronchoscope. A small Killian bronchoscope was introduced into the trachea and the grain of corn located. Several attempts were now made to remove it with a pair of forceps, but they were all futile. The child's condition had grown much worse by this time, and it was deemed advisable not to make any further efforts at this time. A tracheotomy tube was inserted, the wound dressed and the child put to bed.

On the following morning the child's condition had so much improved that I decided it was safe to make another effort to remove this foreign body. After the child had again been anesthetized and the bronchoscope reintroduced, with the Kirstein light, the grain of corn could be distinctly seen. The large part of the grain was lodged in the left bronchus, with the small part sticking out into the trachea, where it could be distinctly seen with the Kirstein light. After some mucous had been wiped away I succeeded in grasping the corn with a pair of long forceps and removing it.

The child's condition improved during the day, the tracheotomy tube was removed on the second day, and the recovery from that time has been uneventful.

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OF THE

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Owned and controlled by the Arkansas Medical Society and published under the direction of the Council monthly.

Edited by
C. P. MERIWETHER, M. D.
Councilor Eighth District.

307-8 Southern Trust Building, Little Rock, Ark., to whom all communications should be addressed.

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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust building.

Editorials.

PROPOSED AMENDMENTS TO THE CONSTITUTION.

AMENDMENT NO. 1.

Whereas, It is well to carefully guard the interests of this society; therefore, be it

Resolved, That the words, "the secretary shall give bond in the sum of \$1,000.00," be added at the beginning of section 4 of chapter 6 of the by-laws; and, further, be it

Resolved, That section 7 be added to chapter 7, as follows:

"Sec. 7. The Council shall have authority to accept or reject all bonds."

AMENDMENT NO. 2.

Whereas, Injustice may be done some county societies by the failure of their delegate or alternate to attend the state meeting; therefore, be it

Resolved, That the following addition be made to chapter 7:

"Sec. 6. In case of a vacancy in the office of delegate, the council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office."

AMENDMENT NO. 3.

Dr. Young introduced the following as recommended by the Council:

Whereas, It seems that the cause of medical organization can be forwarded thereby, therefore, be it

Resolved, That the words "who is a graduate of a reputable medical college" be struck from section 5 of chapter 9 of the by-laws.

The resolutions covering these proposed amendments were submitted to the house of delegates after unanimous adoption by the Council, following a free and thorough discussion of all points involved, and may be taken as an expression of the opinion of the council.

Proposed Amendment No. 1—Simply puts the secretary under a bond of the same amount as the treasurer, and, as he handles just as much money, it is simply protection for both officers and the society. This point needs no sustaining argument. The further resolution embodied in the same proposed amendment merely legalizes the previous custom of the society in definitely empowering the council to accept or reject any proffered bond. This also needs no argument, and should be adopted without opposition.

Proposed Amendment No. 2—Another instance of legalizing acts that have previously been done without authority. The minutes will show that in every meeting held under the present scheme of organization the delegates from one or more county societies have been absent, but another member present. It has been the custom of the House of Delegates to seat the member present as a delegate, although there has been no law to sanction this proceeding. The proposed amendment legalizes this action and names the council as the body to attend to it, thus saving the House of Delegates both time and trouble. Hence proposed amendment No. 2 should be adopted without opposition.

Proposed Amendment No. 3—Here we strike the one that will call for a fight, for we are all aware that there is still strong

opposition to undergraduate membership. Personally, I am free to say that up to the present time I have bitterly opposed this, and will try to make the reasons for my change of ideas plain. Practically all the state societies now admit undergraduates into medical organization, and it is their experience that this is a benefit to all concerned. This fact cannot be gainsaid by anyone who has kept closely in touch with the literature of medical organization. In the uniform constitution for county societies sent out by the American Medical Association, undergraduates are entitled to membership, and this fact has led to no end of confusion and trouble. Some of our county societies, taking this to be the law in this state, have given the council serious trouble. Another element of confusion arises from the fact that a resolution was adopted two years ago giving the county societies authority to take undergraduate members who could not become members of the state society, thus giving rise to two classes in the county society. The upshot of these confusing measures is that many of our county societies have taken in undergraduates without reporting them as such. Many societies are absolutely unable to keep up an active existence without the aid of undergraduate members. In fact, one society in the tenth district, acting under the uniform constitution sent out by the American Medical Association, admitted undergraduates, thus building up an active, valuable society. Upon information that they were acting contrary to law, this society had these gentlemen withdraw, and the consequence is that this society can seldom get a quorum and is practically dead. In another county there are barely enough graduates to organize, and, in spite of strong efforts on the part of myself and my predecessor as councilor, they have never had an active society. But they tell me that with undergraduate help they will be able to sustain a good society. But the most important of all the new points in favor of admitting undergraduates at present is that under our new law no more undergraduates will be licensed to practice, thus insuring their gradual diminution. The great bugaboo in the past has been the fear that these gentlemen would overwhelm the graduates in number, dominate the organization, and thus lead to a retrograde movement. This fear has been proven illy founded by the experience of many other state societies, aside from the well understood fact that all organ-

izations of any character are dominated and directed by the more progressive and up-to-date members. "A little leaven leaveneth the whole lump," and two or three progressive members can infuse life into any number of backward ones, thus inspiring them to better things.

Another consideration is that we believe that we are greatly benefited in our professional work by association with other physicians, else we would not spend the necessary time and money to attend these meetings. Undergraduate physicians have many lives in their hands, and by no sophistry can we justify depriving these people of the benefits of medical organization to the guardians of their health and lives. So, in the name of our common humanity we should invite these gentlemen to join us.

In addition to the good we may do them, they can wonderfully benefit us, for many of them are active practitioners, hard students with acute minds, and can give us many lessons of experience gleaned from the hard field of practical life. Free access to society membership would go far toward smoothing the pathway of both factions by stopping dissensions and jealousies.

So in the name of closer organization, in the name of professional betterment, in the name of peace, and, more than all, in the name of suffering humanity, let us invite these gentlemen to become with us and of us, if necessary going "out into the highways and the byways and bring in whom we may find," so long as he is a legally registered, nonsectarian, honest and honorable physician.

F. B. Y.

THE COMING ANNUAL MEETING AT LITTLE ROCK.

The preliminary program of the thirty-fourth annual session of the Arkansas Medical Society will be found in this number, and each member is requested to read it carefully and see if it does not contain a number that is of special interest to him. The program is well balanced, and should prove interesting from the scientific standpoint.

The House of Delegates will convene Tuesday morning, May 3, in the auditorium of the Hotel Marion, and will be called to order at 9:00 o'clock by the president, Dr. James H. Lenow, of Little Rock. This is the important business body of the society, and, as there are many important measures to be disposed of,

delegates should be prompt in their attendance. One of the most important measures to be acted on is the proposed amendment of the constitution admitting undergraduates to membership. This question has been before the society before, and is again introduced by the Council, who believes the time is now ripe for its adoption. Another important amendment proposed by the Council is, "In case of a vacancy in the office of delegate, the council shall have authority to seat any member of that county society in attendance at said meeting, as delegate, with full right to perform all the duties of that office." In our opinion, this is one of the most important matters the house will be called upon to settle, and it should receive earnest consideration before a vote is taken.

The house will have much new business to dispose of that will be introduced by the suggestions contained in the president's address.

On Wednesday morning at 10:00 o'clock the first general meeting will be held, and an address will be made by the governor, the mayor of Little Rock, the president of the Pulaski County Medical Society, under whose auspices the meeting is held, and Dr. J. W. Scales, of Pine Bluff. These will be followed by the annual address of the president.

In the afternoon the Scientific Sections will begin their work. The Section on Diseases of Children and the Section on Dermatology and Syphilology will occupy all the afternoon. The Section on State Medicine and Public Hygiene will hold its sessions in the auditorium of the Hotel Marion on Wednesday evening, May 4, at 8:00 o'clock. A symposium on the Hookworm Disease has been arranged, and Dr. Charles Wardell Stiles, of Washington, D. C., will deliver the principal address. This is an open meeting to which the public is invited.

In the Section on Medicine, Dr. H. Thibault will read a paper in further elaboration of his original investigations of quinin as a local anesthetic. Dr. Thibault's original investigations have excited wide and favorable comment, and his paper is looked forward to with great interest.

Of the distinguished guests who will contribute to the section are Dr. Jabez Jackson, a noted surgeon of Kansas City, who will deal with original investigations concerning membranous pericolitis. Dr. H. S. Crossen, one of the most skillful abdominal opera-

tors in the Middle West, will contribute to the Section on Obstetrics and Gynecology. In this section Dr. W. C. Dunaway, of Little Rock, will present an original idea in the matter of preventing pelvic adhesions. This paper will excite an animated discussion, for it departs from the general practice in such conditions.

The Committee on Arrangements announce the following entertainments:

The reception to the president will be held at the auditorium of the Hotel Marion on Thursday evening at 8:30. Dancing from 10:00 to 12:00. On Friday the Little Rock Board of Trade will tender the members and visitors a banquet at the Hotel Marion.

The entertainment for visiting ladies has been delegated to the wives of local physicians, and daily announcements of the program will be made by these committees.

The alumni of the Medical Department of Tulane University will hold a reunion on Wednesday evening at 10:00 o'clock at the Hotel Marion, followed by a dinner.

The Hotel Marion will be the official headquarters, and all meetings will be held in the new and beautiful auditorium annex. Members, on arriving, will be registered by the secretary in this hall and receive the official badge. Hotel accommodations will be ample, and there is no necessity of engaging rooms in advance. The leading hotels are, besides the Hotel Marion, the New Capital, Merchants, Hotel Main and Gleason's.

A rate of one and one-third has been promised by the railroads. Date of sale, Sunday, May 1, and limited to May 8. It is not necessary to get a certificate from the local agent.

We are advised by the secretary that not less than 500 members are expected to attend the meeting, and it is earnestly hoped that this will prove a record-breaking meeting in point of interest and attendance. Let every member make his arrangements to take a few days off and come and help in the medical and scientific uplift.

POINTS REGARDING THE CENSUS.

The census began April 15, and must be completed in two weeks in cities and in thirty days in all other areas.

The enumerators will wear a badge inscribed "United States Census, 1910."

The law requires every adult person to furnish the prescribed information, but also provides that it shall be treated confiden-

tially, so that no injury can come to any person from answering the questions.

The president has issued a proclamation calling on all citizens to coöperate with the census and assuring them that it has nothing to do with taxation, army or jury service, compulsory school attendance, regulation of immigration, or enforcement of any law, and that no one can be injured by answering the inquiries.

It is of the utmost importance that the census of population and agriculture in this state be complete and correct. Therefore, every person should promptly, accurately and completely answer the census questions asked by the enumerators.

SENATOR OWEN MAKES PLEA.

The address of Senator Robert L. Owen of Oklahoma on "The Conservation of Human Life and Energy as a National Asset" was the feature of the session of the Southern Educational Conference, which held its meeting in this city April 6, 7 and 8. His speech was really an argument in advocacy of his bill now pending in the United States Senate, which provides for the establishment of a department of public health at Washington, in charge of a cabinet officer.

Senator Owen is a polished speaker, and his address was an unusual oratorical effort. He carried his hearers away from the topic of education, which had engrossed them for three days. In conclusion, he asked each one to go home and stir up sentiment for his bill, and he received many assurances of hearty support. He had at his command appalling mortality statistics to prove his point that the government must come to the aid of the people in the fight against disease.

"It would be difficult," he said, "to exaggerate the importance of the conservation of our national resources, of our forests, of our coal mines, mineral wealth, water power and the conservation of the fertility of our lands. But the conservation of our national vitality and our national efficiency is far more important. The national loss of human life from preventable causes would be amazing and would be incredible if it had not been proved as a scientific fact upon the most eminent authority.

"We lose 600,000 people annually whose lives could be saved—a vast army. The total number of men who died from gunshot wounds, homicide and accident in the Span-

ish-American war was 1,020. We lose 1,700 every day in the year whose lives could be saved under proper conditions. We lose over 500 times as many human beings annually than were lost from bullet wounds in the Spanish-American war. Estimating this loss at \$3,500.00 apiece, it would be a loss of \$2,000,000,000.00 per annum. Twice the gross national income every year.

"But this is not all. We have 3,000,000 people on an average incapacitated by preventable sickness from one year's end to another—a financial loss nearly as large as the loss by preventable death. In one single block in New York city 158 cases of tuberculosis were recorded.

"A year ago I pointed out on the floor of the senate the volume of this preventable death, basing my estimates on the comparative mortality in New Zealand, where the mortality is 9 and a fraction to the thousand. In the United States it is 16.5 to the thousand. This is a difference of 7 to the thousand. In 90,000,000 this means 630,000 preventable deaths per annum.

"The difference lies in that New Zealand protects her citizens from the grinding oppression of monopoly. The poorest citizen can borrow money at 4 per cent to build himself a sanitary home.

"Socialism? Yes. I don't care if it is Socialism. I'm in favor of saving human lives, no matter what you call it. There are some good kinds of Socialism and some bad kinds. I'm in favor of all the good kinds."

Senator Owen launched into a scathing attack on the Bureau of Public Health, which is under the secretary of the treasury. He told of the inefficiency of the department when the bubonic plague broke out in San Francisco some years ago; how the report of the plague was suppressed by commercial greed; how, since the plague has spread over the entire Pacific coast and may at any moment break out and ravage the entire coast, and how since the San Francisco epidemic the plague has cost the government \$1,000,000.00.

The speaker outlined his plan for a Department of Public Health to rank on an equal basis with all the other departments, and which could devote its entire time to looking after the public health and the extermination of contagious and deadly diseases.

We print below a copy of Senator Owen's bill, and every doctor in Arkansas should write his senator and congressman to support and work for it.

Senator Owen's bill (Senate Bill No. 6049) was introduced in the senate February 1, 1910, was read twice and referred to the Committee on Public Health and National Quarantine. The text of the bill is as follows:

"A Bill Establishing a Department of Public Health, and for Other Purposes.

"Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there is hereby established a Department of Public Health under the supervision of the secretary of public health, who shall be appointed by the president a cabinet officer, by and with the consent of the senate, at a salary of twelve thousand dollars per annum, and with like tenure of office of other cabinet officers.

"Sec. 2. That all departments and bureaus belonging to any department, excepting the Department of War and the Department of the Navy, affecting the medical, surgical, biological or sanitary service, or any question relative thereto, shall be combined in one department, to be known as the Department of Public Health, particularly including therein the Bureau of Public Health and Marine Hospital Service, the medical officers of the revenue cutter service, the medical referee, the assistant medical referee, the surgeons and examiners of the pension office, all physicians and medical officers of the service of the Indian Bureau or the Department of the Interior, at old soldiers' homes, at the Government Hospital for the Insane and the Freedmen's Hospital and other hospitals of the United States; the Bureau of Entomology, the Bureau of Chemistry and of Animal Industry of the Department of Agriculture; the hospitals of the Immigration Bureau of the Department of Commerce and Labor; the emergency relief in the Government Printing Office, and every other agency of the United States for the protection of the health of the people of the United States, or of animal life, be, and are hereby, transferred to the Department of Public Health, which shall hereafter exercise exclusive jurisdiction and supervision thereof.

"Sec. 3. That the official records, papers, furniture, fixtures and all matters or property of any kind or description pertaining to the business of any such bureau, office, department or branch of the public service is hereby transferred to the Department of Public Health.

"Sec. 4. That the secretary of public health shall have supervision over the Department of Public Health and shall be assisted by an assistant secretary of public health, to be appointed by the president, by and with the advice and consent of the senate, at a salary of six thousand dollars a year, with such duties as shall be prescribed by the secretary not inconsistent with law.

"Sec. 5. That the secretary of public health shall be authorized to appoint such subordinates as may be found necessary. There shall be a chief clerk, appointed at a salary not to exceed three thousand dollars a year, and such other clerks as may from time to time be authorized by Congress.

"Sec. 6. That the officers and employees of the public service transferred to the Department of Public Health shall, subject to further action by Congress, receive the salaries and allowances now provided by law.

"Sec. 7. That it shall be the duty and province of such Department of Public Health to supervise all matters within the control of the federal government relating to the public health and to diseases of animal life.

"Sec. 8. That it shall gather data concerning such matters, impose and enforce quarantine regulations, establish chemical, biological and other standards necessary to the efficient administration of said department and give due publicity to the same.

"Sec. 9. That the secretary of public health shall establish a Bureau of Biology, a Bureau of Chemistry, a Bureau of Veterinary Service, a Bureau of Sanitary Engineering, reporting such proposed organizations to Congress for suitable legislation relative thereto.

"Sec. 10. That all unexpended appropriations made for the ensuing year shall be available on and after July 1, 1910, for the Department of Public Health, where such appropriations have been made to be used by any branch of the public service transferred by this act to the Department of Public Health. It shall be the duty of the secretary of public health to provide, on proper requisition, any medical, sanitary or other service needed of his department required in another department of the government.

"Sec. 11. That any other department requiring medical, surgical, sanitary or other similar service shall apply to the secretary of public health therefor whenever it is practicable.

"Sec. 12. That all officers or employees of the government transferred by this act to the Department of Public Health will continue to discharge their present duties under the present organization until July 1, 1910, and after that time until otherwise directed by the secretary of public health or under the operation of law.

"Sec. 13. That all laws or parts of laws in conflict with this act are hereby repealed."

HEALTH DAY.

To the Editor:

The stress of things local has not allowed me an opportunity to address you since my advent to the secretaryship, but thought a mention in the Journal of what follows might prove an incentive to other county societies to take up this movement.

Some few months ago a movement was inaugurated for a congenial meeting between the county society and the school board, with the result of a declaration of an annual holiday, to be known as "Health Day," the same to be the first Tuesday in May of each year. To stimulate interest, cash prizes to the amount of \$75.00 are to be awarded to the pupils of the schools throughout the county for the best essays of five- to ten-minute length, on "How to Keep Well." These were divided according to grade, the teacher choosing one or two representatives from each, and three physicians of the county society to act as final judges for the awarding of prizes.

The reading of essays is to be interspersed by short talks from three of the local profession along the lines of hygiene and preventive medicine, as also vocal and musical numbers. The matter has been given extensive publicity through the press, and the existing enthusiasm speaks much indeed for the way in which the general public has taken up the idea. This is entirely under the auspices of the medical society, and the school board was asked solely for its stimulating influence.

Suffice it to say, the amount expended by the society has more than already been repaid by the knowledge gained to parents and children, inasmuch as each child from the fourth grade to and including the high school has had to prepare an essay.

To the casual onlooker, the magnitude of good here accomplished is distinct, and we look forward to a crowded opera house on

May 3. I might add, in conclusion, the exercises will last just two hours, and are considered as a part of the regular school work of the children who will attend in a body, some 600 strong.

G. G. ALTMAN,
Secretary Phillips County Medical Society.

Personals.

Dr. C. M. Morgan of Camden spent several days in the city during the Southern Educational Conference.

Dr. Albert McGill of Chidester was visiting friends in the city last week, and is now in Baltimore doing some post work at Johns Hopkins University.

Dr. J. B. Dickson of Douglas was in the city during the educational conference.

Dr. J. B. Roe of Calico Rock, chairman of the Section on Gynecology and Obstetrics, is in Kansas City taking postgraduate work.

Dr. H. H. Rightor of Helena has been in Rochester, Minn., for several days.

Drs. Jabez Jackson of Kansas City, H. S. Crossen of St. Louis and Charles W. Stiles of Washington, D. C., will be our distinguished guests during the state meeting.

Dr. W. B. Welsch of Fayetteville, one of the charter members of the Arkansas Medical Society and its ex-president, will be present at the state meeting.

Dr. G. A. Warren of Black Rock has been appointed by President Lenow as the fraternal delegate to the meeting of the Tennessee Medical Society.

Deaths.

On April 7, 1910, Dr. R. B. Christian died at his home in this city after a short illness, leaving a wife, several children and a host of mourning friends to grieve for his love and presence.

Therefore be it resolved by the Pulaski County Medical Society, That in the death of Dr. Christian the society has lost one of its most efficient and conscientious members, whose memory we will long cherish as a man whom to know was to respect and love.

Be it further resolved, That a copy of this resolution be spread upon our minutes and a copy be sent to the wife and family.

Respectfully, S. U. KING,
E. R. DIBRELL,
R. W. LINDSEY.

District and County Societies.

POPE COUNTY.—The Pope County Medical Society met at Russellville Wednesday, April 6, with President W. A. Montgomery in the chair. "The Uses and Abuses of Drugs" was discussed by the members, all of whom took an active part in the discussion. "Ethics of the Profession" was touched on in a talk by Dr. Drummond. The members present were: Drs. Montgomery, Smith, Drummond, Ragsdale, R. H. Gardner, J. L. Ross, C. K. Campbell, Teeter and Hays. The society adjourned to meet in Atkins on May 18.

JOHNSON COUNTY.—The Johnson County Medical Society met Monday, April 4, 1910, in the office of Hunt, Kolb & Hunt. Owing to the very rainy day, very few of the doctors outside of town were present. Officers for the ensuing year were elected, as follows: President, E. H. Hunt; vice president, G. D. Huddleston; secretary and treasurer, L. A. Cook; delegate to the State Society, G. D. Huddleston; alternate, W. R. Hunt. Neither of the essayists for the day being present, the society discussed topics of interest to the members, and the same program was continued for next meeting.

L. A. Cook, *Secretary*.

NEVADA COUNTY.—The Nevada County Medical Society, at its annual meeting in Prescott Friday, April 8, elected the following officers: President, Dr. S. J. Hesterly; vice president, Dr. G. O. Marsh; secretary and treasurer, Dr. A. S. Buchanan; delegate to the State Society, Dr. W. W. Rice; alternate, Dr. A. S. Buchanan.

YELL COUNTY.—One among the most profitable of our meetings was held by the Yell County Medical Society at Plainview, Ark., on April 12, 1910. Present, Dr. S. E. Miller, president; Dr. C. B. Linzy, vice president; Dr. A. H. McKenzie, secretary and treasurer; members, Drs. M. A. Worsham and L. R. McCarty, of Centerville; L. E. Love, Dardanelle; A. D. Gillum, Rover; J. L. Albright and W. E. Ballinger, Plainview. Drs. J. H. Crum, of Ola, and G. C. Davis, of Birta, were elected to membership. Visitors, L. Evans, D. D. S., Hon. J. I. Owens, editor Fourche Valley Herald, and Hon. H. E. Potts, Democratic nominee for representative for this county.

Dr. S. E. Miller read a very valuable paper on "Puerperal Eclampsia;" L. Evans, D. D. S., one on "Oral Prophylaxis." Both papers were freely discussed by the society.

Dr. C. B. Linzy reported a case of puerperal eclampsia. Dr. J. L. Albright a case of colonis impaction; Dr. Love one on pneumonia clinic. Dr. L. R. McCarty presented a boy eleven years old suffering from acute chorea.

The thanks of the society were extended to the Hon. J. I. Owen, Hon. H. E. Potts, the physicians and citizens of Plainview for the kindness and hospitality shown us during the session.

The society adjourned to meet at Ola, Ark., on the second Tuesday in June, 1910.

A. H. McKENZIE, *Secretary*.

The Tenth Councilor District Medical Society met at Fort Smith March 15. About seventy-five members were present. The sessions were held in the Goldman Hotel. The following program was carried out:

"Prostatic Obstruction; Its Diagnosis and Treatment"—Dr. Bransford Lewis, St. Louis, Mo.

"Senile Prostatic Hypertrophy"—Dr. C. F. Perkins, Springdale, Ark.

"Dermoids of Ovaries"—Dr. W. R. Brooksher, Fort Smith, Ark.

"Closure of Preputial Orifice"—Dr. Thos. Douglas, Ozark, Ark.

"Notes on Prevention of Disease"—Dr. E. G. Epler, Fort Smith, Ark.

"Apomorphine Hydrochloride"—Dr. J. G. Omelvena, Midland, Ark.

"Amebic Dysentery"—Dr. J. C. Amis, Fort Smith, Ark.

"Assimilation and Elimination"—Dr. J. Morse Griffin, Sulphur Springs, Ark.

"Report of Cases"—Dr. T. W. Blackburn, Springdale, Ark.

"Skin Grafting"—Dr. H. D. Wood, Fayetteville, Ark.

The Sebastian County Medical Society entertained with a banquet to the visiting doctors.

The following officers were elected:

President, Dr. Thos. Douglas, of Ozark; vice president, Dr. J. R. Smith, of Paris; secretary, Dr. D. R. Dorente, of Fort Smith; treasurer, Dr. O. M. Bourland, of Van Buren.

The next meeting will be held the third Tuesday of next September, at Fayetteville, Ark.

D. R. DORENTE, *Secretary*.

PROGRAM

Thirty-fourth Annual Session Arkansas
Medical Society, at Little Rock,
May 3, 4, 5 and 6, 1910.

OFFICERS, 1909-1910.

President—James H. Lenow, Little Rock.
First Vice President—H. D. Wood, Fayetteville.
Second Vice President—E. L. Watson, Newport.
Third Vice President—F. A. Corn, Lonoke.
Treasurer—J. S. Wood, Hot Springs.
Secretary—Morgan Smith, Little Rock.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION.

E. C. Hay, Hot Springs.
C. C. Stephenson, Little Rock (term expires).
Alternates.

B. Hatchett, Fort Smith.
G. A. Warren, Black Rock (term expires).

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, Chairman; A. E. Cone, Portland, Secretary.
Surgery—J. A. Lightfoot, Texarkana; Chairman; E. E. Barlow, Dermott, Secretary.
Obstetrics and Gynecology—J. B. Roe, Calico Rock, Chairman; W. R. Rodman, Cushman, Secretary.

Pathology—J. R. Dibrell, Little Rock, Chairman; F. B. Kirby, Harrison, Secretary.

State Medicine and Public Hygiene—C. H. Cargile, Bentonville, Chairman; O. M. Bourland, Van Buren, Secretary.

Diseases of Children—F. T. Isbell, Horatio, Chairman; R. W. Lindsey, Little Rock, Secretary.

Dermatology and Syphilology—G. A. Hebert, Hot Springs, Chairman; J. H. Chesnutt, Hot Springs, Secretary.

COUNCILOR DISTRICTS AND COUNCILORS. 1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor: **H. R. McCarroll**, Walnut Ridge. Term of office expires 1911.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor: **H. O. Walker**, Newport. Term expires 1910.

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Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor: **J. C. Wallis**, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor: **C. P. Meriwether**, Little Rock. Term expires.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor: **C. T. Cannady**, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor: **F. B. Young**, Springdale. Term expires.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
Second District—F. T. Murphy, Secretary, Brinkley.
Third District—F. B. Young, Springdale.
Fourth District—M. L. Norwood, Lockesburg.
Fifth District—George S. Brown, President, Conway.
Sixth District—W. S. Stewart, Pine Bluff.
Seventh District—J. C. Wallis, Arkadelphia.

STANDING COMMITTEES.

Committee on State Legislation and Public Policy—St. Cloud Cooper, Fort Smith, Chairman; George S. Brown, Conway; J. T. Henry, Eagle Mills.

Committee on Scientific Program—Adam Guthrie, Prescott, Chairman; A. Watkins, Little Rock; Morgan Smith, Little Rock.

Committee on Arrangements—F. Vinsonhaler, Little Rock, Chairman; E. R. Dibrell, Little Rock; J. R. Wayne, Little Rock.

SPECIAL COMMITTEES.

Committee on Newspaper Medical Advertisements—Thomas Douglass, Ozark.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., Chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on the Consolidation of Medical Colleges—Frank B. Young, Springdale, Chairman; J. L. Burns, Jonesboro; H. H. Rightor, Helena; H. O. Walker, Newport; C. S. Pettus, El Dorado; R. H. T. Mann, Texarkana; W. S. Stewart, Pine Bluff; J. C. Wallis, Arkadelphia; George S. Brown, Conway; L. Kirby, Harrison.

Committee to Perfect An Organization for the Study and Prevention of Tuberculosis—J. S. Shibley, Paris, Chairman; D. C. Walt, Little Rock; M. G. Thompson, Hot Springs; W. B. Lawrence, Batesville; J. B. Bolton, Eureka Springs; H. C. Dunavant, Osceola.

REDUCED RAILROAD RATES.

All railroads in the State have made a rate of fare and one-third, effective May 2, limited to return to starting point May 8. Agents' certificates not required.

REGISTRATION.

Members on arriving should repair at once to the general headquarters in the Marion Hotel, where a Registration Bureau will be found, and receive the official badge.

HEADQUARTERS.

The Marion Hotel will be the official headquarters, and all meetings will be held in the annex auditorium. Mail addressed in care of the Secretary will insure prompt delivery.

SPECIAL MEETING.

Wednesday, 8:00 p. m., Auditorium Hotel Marion. Symposium on the Hookworm Disease. Dr. Charles W. Stiles, of Washington, D. C., will deliver an address illustrated with stereopticon views. The public is invited.

HOUSE OF DELEGATES.**First Meeting, Tuesday, May 3, 9 a. m.**

Order of Business.

1. Call to order by the President, James H. Lenow, Little Rock.
2. Prayer by Rev. Henry N. Hyde, Little Rock.
3. Preliminary report of the Committee on Credentials.
4. Roll call.
5. Reading and adoption of the minutes of the thirty-third annual meeting.
6. President's address to the House of Delegates.
7. Appointment of committees, reference, nominating, etc.
8. Reports of officers.
 - (a) Report of Treasurer, J. S. Wood, Hot Springs.
 - (b) Report of Secretary, Morgan Smith, Little Rock.
 - (c) Report of the Chairman of the Council, J. C. Wallis, Arkadelphia.

Tuesday, May 3, 2 p. m.

9. Roll call.
10. Reports of Standing Committees.
 - (a) Report of Committee on Scientific Work, Adam Guthrie, Chairman, Prescott.
 - (b) Report of Committee on Public Policy and Medical Legislation, St. Cloud Cooper, Chairman, Fort Smith.
 - (c) Report of Committee on Arrangements, F. Vinsonhaler, Chairman, Little Rock.
11. Reports of Special Committees.
 - (a) Report of Committee to Perfect An Organization for the Study and Control of Tuberculosis, J. S. Shibley, Chairman, Paris.
 - (b) Report of Committee on Consolidation of Medical Colleges, F. B. Young, Chairman, Springdale.
 - (c) Report of Committee on Medical Advertisements.
 - (d) Report of Board of Visitors to the Medical Department, University of Arkansas, and the College of Physicians and Surgeons, O. M. Bourland, Van Buren, Chairman.
12. Unfinished business.
13. New business.
 - (a) Adoption of Amendments, Nos. 1, 2 and 3, as follows:
 - (1) Amendment No. 1.
Chapter VI., Sec. 4, to read as follows: "The Secretary shall give bond in the sum of \$1,000.00."
 - (2) Amendment No. 2.
Sec. 5 added to Chapter VI., to read as follows: "The Council shall have authority to accept or reject all bonds."
 - (3) Amendment No. 3.
Chapter VII., addition of Sec. 6, to read as follows: "In case of a vacancy in the office of Delegate, the Council shall have authority to seat any member of that county society in attendance at said meeting as Delegate, with full right to perform all the duties of that office."
 - (4) Amendment No. 4.
Chapter IX., Sec. 5., strike out "Who is a graduate of a reputable medical college."

(Daily meetings will be held subject to the action of the House of Delegates.)

SECOND MEETING.**Friday, May 6, 8:30 a. m.**

14. Roll call.
15. Report of Nominating Committee and election of the following officers:

President.	Treasurer.
First Vice President.	Secretary.
Second Vice President.	Five Councilors.
Third Vice President.	
16. Reports of Reference Committees.
 - (a) Reference committee on President's address.
 - (b) Reference committee on Secretary's report.
 - (c) Reference committee on Treasurer's report.
 - (d) Reference committee on Committee on Scientific Work.
 - (e) Reference committee on Committee on Public Policy and Medical Legislation.
 - (f) Reference committee on Committee to Perfect an Organization for the Study and Control of Tuberculosis.
 - (g) Reference committee on Consolidation of Arkansas Medical Colleges.
 - (h) Reference committee on Medical Advertisements.
17. Further new business.
18. Adjournment.

FIRST GENERAL MEETING.**Wednesday, May 4, 10 a. m.**

Auditorium, Marion Hotel.

1. Call to order by the President, James H. Lenow, Little Rock.
2. Prayer by Rev. Henry N. Hyde, Little Rock.
3. Address of Welcome—Hon. George W. Donaghey, Governor of Arkansas.
4. Address of Welcome—Hon. William R. Duley, Mayor of Little Rock.
5. Address of Welcome—Mahlon D. Ogden, President Pulaski County Medical Society, Little Rock.
6. Introduction of Fraternal Delegates.
7. President's Address—James H. Lenow, Little Rock.
8. Announcement by the Committee on Arrangements, F. Vinsonhaler, Chairman, Little Rock.
9. Adjournment.

SECOND GENERAL MEETING.**Thursday, May 5, 8:30 a. m.**

Auditorium, Marion Hotel.

1. Call to order by the President, James H. Lenow.
2. Reports of committees.
3. Unfinished business.
4. New business.
5. Adjournment.

THIRD GENERAL MEETING.**May 6, 9 a. m.**

Auditorium, Marion Hotel.

1. Call to order by the President, James H. Lenow.
2. Reports of committees.
3. Unfinished business.
4. New business.
5. Adjournment sine die.

SCIENTIFIC PROGRAM.**Section on State Medicine and Public Hygiene.**

J. S. Cargile, Bentonville, Chairman; O. M. Bourland, Van Buren, Secretary.

(This section will be held in the Auditorium of the Marion Hotel, Wednesday evening, May 4, at 8 o'clock.)

1. Chairman's Address—J. S. Cargile, Bentonville.

Symposium on the Hookworm Disease.

1. Pathology and Etiology—Wm. H. Deadrick, Helena.
2. Diagnosis and Symptomatology—Albert McGill, Chidester.
3. Treatment—W. S. Stewart, Pine Bluff.
4. (Title not announced)—Charles Wardell Stiles, Washington, D. C. (Illustrated lecture).

Section on Diseases of Children.

Wednesday Afternoon, May 4, 2 o'clock.

Officers of Section—Chairman, F. T. Isbell, Horatio; Secretary, R. W. Lindsey, Little Rock.

1. Dysentery in Children. F. T. Isbell, Horatio.
2. Bottle-fed Babies. J. T. Clegg, Siloam Springs.
3. Otitis Media and Mastoid Abscess in Children. Robert Caldwell, Little Rock.
4. Rheumatism in Children. D. E. Broderick, Kansas City, Mo.

Section on Dermatology and Syphilology.

Wednesday Afternoon, May 4, 3:30 o'clock.

Officers of Section—Chairman, G. A. Hebert, Hot Springs; Secretary, J. H. Chesnutt, Hot Springs.

1. The Wasserman Reaction. Morgan F. Mount, Hot Springs.
2. The Intramuscular Injection of Mercury, with Special Reference to the Insoluble Preparations. Eugene Carson Hay, Hot Springs.
3. Brain Syphilis, with Report of Cases. James H. Chesnutt, Hot Springs.

Section on Medicine.

Thursday Morning, May 5, 8:30 o'clock.

Officers of Section—Chairman, J. B. Grammar, Searcy; Secretary, A. E. Cone, Portland.

- Chairman's Address. J. B. Grammar, Searcy.
1. The Part of the State and Municipality in the War Against Tuberculosis. J. S. Shibley, Paris.
2. Quinin Anesthesia. H. Thibault, Scott.
3. Tonsillectomy, Its Indications and Methods. R. H. T. Mann, Texarkana.
4. Preventable Blindness. John G. Watkins, Little Rock.
5. Pellagra. A. J. Vance, Harrison.
6. The Medical Side of Appendicitis. J. S. Rinehart, Camden.
7. The Pharmacological Action and the Therapeutic Uses of Alcohol. C. E. Witt, Little Rock.

Afternoon Session.

2 O'clock.

8. Symposium on Typhoid Fever.
 - (a) Diagnosis and Symptomatology. A. E. Harris, Little Rock.
 - (b) Prevention. O. K. Judd, Little Rock.
 - (c) Peculiarities and Some Peculiar Types of Typhoid Fever. G. A. Warren, Black Rock.
 - (d) Treatment. E. R. Dibrell, Little Rock.

9. Purpura Rheumatica. James H. Chesnutt, Hot Springs.

10. Ileocolitis. C. D. Stevens, Magnolia.

11. (Title not announced). E. L. Beck, Texarkana.

12. Scorbutus in Children. H. N. Street, Argenta.

13. The Examination of School Children. T. E. Fuller, Texarkana.

14. Facts Relating to Health Conditions in the Delta of the Mississippi Valley. Vernon MacCammon, Arkansas City.

Section on Surgery.

Friday, May 6, 9:15 a. m.

Officers of Section—Chairman, J. A. Lightfoot, Texarkana; Secretary, E. E. Barlow, Dermott.

1. Treatment of Fractures of Long Bones. H. H. Smiley, Texarkana.
2. Appendicitis. T. F. Kittrell, Texarkana.
3. Surgical Tuberculosis. W. A. Snodgrass, Little Rock.
4. An Unusual Case of Appendicitis. C. S. Petrus, El Dorado.
5. Symposium on Gall-bladder Disease.
 - (a) Acute and Chronic Cholangitis. C. E. Bentley, Little Rock.
 - (b) Cholelithiasis. Frank B. Young, Springdale.
 - (c) Acute and Chronic Cholecystitis. J. W. Smith, Hot Springs.
6. Membranous Pericolicitis. Jabez Jackson, Kansas City, Mo.
7. Exophthalmic Goiter. H. H. Kirby, Little Rock.

Section on Obstetrics and Gynecology.

Friday Afternoon, May 6, 2 o'clock.

Officers of Section—Chairman, J. B. Roe, Calico Rock; Secretary, W. R. Rodman, Cushman.

1. Chairman's Address. J. B. Roe, Calico Rock.
2. Rupture of Uterus; Report of Cases. I. Z. Sexton, Siloam Springs.
3. Uterine Fibromyoma. J. W. Smith, Hot Springs.
4. Modern Methods of Treatment for Severe Prolapse of Uterus. H. S. Crossen, St. Louis, Mo.
5. Pelvic Adhesions. W. C. Dunaway, Little Rock.
6. A Plea for the Early Diagnosis and Treatment of Cancer. H. H. Rightor, Helena.
7. Caesarian Section Under Unfavorable Conditions. A. G. Harrison, Kensett.
8. Caesarian Section. George S. Brown, Conway.
9. Pelvic Cellulitis in the Female. R. C. Dorr, Batesville.
10. A Plea for More Accurate Diagnosis in Gynecologic Conditions. W. A. Snodgrass, Little Rock.

PROGRAM OF ENTERTAINMENTS.

(The official member's badge, or one of those provided for ladies and guests, will be required for admission.)

Thursday—8:30 p. m.: Reception to the President, Dr. James H. Lenow, in the Auditorium, Hotel Marion. 10 to 12 p. m.: Dancing.

Friday—9 to 12 p. m.: Annual banquet, under the auspices of the Little Rock Board of Trade.

Special Entertainments.

Wednesday—10 to 12 p. m.: Alumni Tulane University, Medical Department. Dinner and reunion at the Hotel Marion.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.
 President-Elect—William H. Welch, Baltimore.
 First Vice President—Robert Wilson, Charleston, S. C.
 Second Vice President—Charles J. Kipp, Newark, N. J.
 Third Vice President—Alexander Lambert, New York City.
 Fourth Vice President—Stanley P. Black, Pasadena, Cal.
 General Secretary—George H. Simmons, Chicago.
 Treasurer—Frank Billings, Chicago.

Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.

Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Soliman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; O. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

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 Delegate to American Medical Association—E. C. Hay, Hot Springs.
 Alternate—B. Hatchett, Fort Smith.

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 Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.
 Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS.

1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.
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COMMITTEES, 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.
 Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.
 Second District—F. T. Murphy, secretary, Brinkley.
 Third District—F. B. Young, Springdale.
 Fourth District—M. L. Norwood, Lockesburg.
 Fifth District—George S. Brown, President, Conway.
 Sixth District—W. S. Stewart, Pine Bluff.
 Seventh District—J. C. Wallis, Arkadelphia.

Officers of Component Societies, 1909-1910.

County Society	President	Address	Secretary	Address
Arkansas	W. H. Morehead	Stuttgart	E. H. Winkler	DeWitt
Ashley	J. W. Simpson	Hamburg	E. M. Scott	Hamburg
Baxter	J. A. Hipp	Buford	J. J. Morrow	Cotter
Benton	C. A. Rice	Gentry	J. H. Beard	Gentry
Boone	R. S. Crebs	Olvey	L. J. Sams	Harrison
Bradley	W. T. Fike	Warren	R. Martin	Warren
Calhoun	E. T. Jones	Hampton	T. E. Rhine	Thornton
Carroll	J. D. Jordan	Eureka Springs	Frank Pace	Eureka Springs
Chicot	M. M. Norton	Sunnyside	E. P. McGehee	Lake Village
Clay	A. North	Palatka	N. J. Latimer	Corning
Clark	E. K. Williams	Arkadelphia	J. H. Cuffman	Gurdon
Cleveland	Charles Leall	Kingsland	J. F. Crump	Rison
Columbia	G. E. Cannon	Magnolia	P. M. Smith	Magnolia
Conway	F. Gordon	Morrilton	G. W. Ringgold	Morrilton
Craighead	W. C. Haltom	Jonesboro	G. Waddell	Jonesboro
Desha	Vernon MacCammon	Arkansas City	S. D. Wheat	McGehee
Drew	A. S. J. Collins	Monticello	S. O. Kimbro	Monticello
Faulkner	G. L. Henderson	Greenbrier	I. N. McCollum	Conway
Franklin	W. W. Rambo	Alston	Thos. Douglass	Ozark
Grant	J. L. Butler	Sheridan	J. B. Shaw	Sheridan
Greene	W. R. Owens	Paragould	Olive Wilson	Paragould
Hempstead	H. R. Giles	Hope	H. H. Darnall	Columbus
Hot Spring	W. A. Carroll	Saginaw	R. N. Donnell	Malvern
Hot Springs-Garland	M. F. Mount	Hot Springs	J. S. Wood	Hot Springs
Howard-Pike	W. H. Toland	Mineral Springs	J. S. Hopkins	Nashville
Independence	C. G. Hinkle	Batesville	O. J. T. Johnson	Floral
Jackson	O. E. Jones	Newport	A. L. Best	Newport
Jefferson	C. K. Caruthers	Pine Bluff	W. T. Lowe	Pine Bluff
Johnson	T. B. Blakely	Coal Hill	L. A. Cook	Clarksville
Lafayette	D. W. Bright	Lewisville	F. W. Youmans	Lewisville
Lawrence	J. C. Land	Walnut Ridge	H. R. McCarroll	Walnut Ridge
Lee	W. B. Bean	Marianna	O. L. Williamson	Marianna
Little River	W. L. Shirey	Foreman	W. E. Vaughan	Richmond
Lincoln	J. F. Johns	Grady	B. F. Tarver	Star City
Logan	E. E. Scott	Magazine	J. S. Shibley	Paris
Lonoke	J. R. Cuning	Lonoke	S. A. Southall	Lonoke
Miller	H. R. Webster	Texarkana	L. J. Kosminsky	Texarkana
Mississippi	S. A. Lowry	Luxora	O. Howton	Oseola
Monroe	T. J. Stout	Brinkley	E. D. McKnight	Brinkley
Nevada	Adam Guthrie	Prescott	A. S. Buchanan	Prescott
Ouachita	E. D. Early	Camden	J. T. Henry	Eagle Mills
Perry	M. E. Howard	Perryville	W. S. Blackwell	Bigelow
Phillips	J. W. Bean	Marvell	H. H. Rightor	Helena
Polk	W. P. Parks	Mena	F. A. Lee	Mena
Pope	R. M. Drummonds	Russellville	R. W. Darr	Atkins
Prairie	F. C. Robinson	Hazen	J. R. Lynn	Hazen
Pulaski	O. K. Judd	Little Rock	E. P. Bledsoe	Little Rock
Randolph	H. L. Throgmorton	Pocahontas	W. E. Hughes	Pocahontas
Saline	J. M. Phillips	Benton	C. Prickett	Traskwood
Sebastian	St. Cloud Cooper	Fort Smith	D. R. Dorente	Fort Smith
Searcy	Sam G. Daniell	Marshall	C. B. Hollabaugh	Marshall
Sevier	F. T. Isbell	Horatio	P. H. Phillips	Horatio
Sharp	W. E. Pounders	Sidney	T. J. Woods	Evening Shade
St. Francis	L. H. Merritt	Forrest City	J. A. Bogart	Forrest City
Union	H. H. Niehuss	Wesson	C. S. Pettus	El Dorado
Washington	D. C. Summers	Elm Springs	Nina V. Hardin	Fayetteville
White-Cleburne	J. M. Jelks	Searcy	S. T. Tapscott	Searcy
Woodruff	R. Q. Patterson	Augusta	L. E. Biles	Augusta
Yell	J. R. Linzy	Dardanelle	A. H. McKenzle	Dardanelle

Notice to County Societies.

To Secretaries of County Medical Societies:

The office of secretary of the county medical society, to which you have been elected, is the most important position in your county organization, and, in fact, the county secretary is the most important factor in the state Society, for upon him depends the success of the county organization which goes to make up the state Society. No man should undertake the duties of secretary unless he is ready to work for the good of his society, and unless he is peculiarly interested he should not enter upon these important duties. The secretary is responsible for detailed data and reliable information concerning the individual members of his county organization, as well as other physicians in his county. He should keep a list of members, alphabetically arranged, which list should give name, post-office, county, date of graduation, date of license, alma mater, and date of joining the society. Every county secretary should be familiar with the by-

laws governing county organizations. I would suggest to county societies that the office of secretary and treasurer be combined, for experience has shown that one man can do this work to greater advantage than two, and that many mistakes will be thus avoided. Every county secretary should make it a point to know in person and keep in touch with every member of his local society. He should, also, see that every member is notified of every meeting. Frequent meetings of county societies should be encouraged. Programs should be arranged in advance and members notified as to what subjects will be discussed and who will discuss them. Every county society should have a fixed place and date of meeting. If county secretaries will become enthusiastic, their enthusiasm will permeate their county organizations. The present indications are that this will be a most successful year, and a great part of the success will depend on county secretaries. Let us have your best efforts.

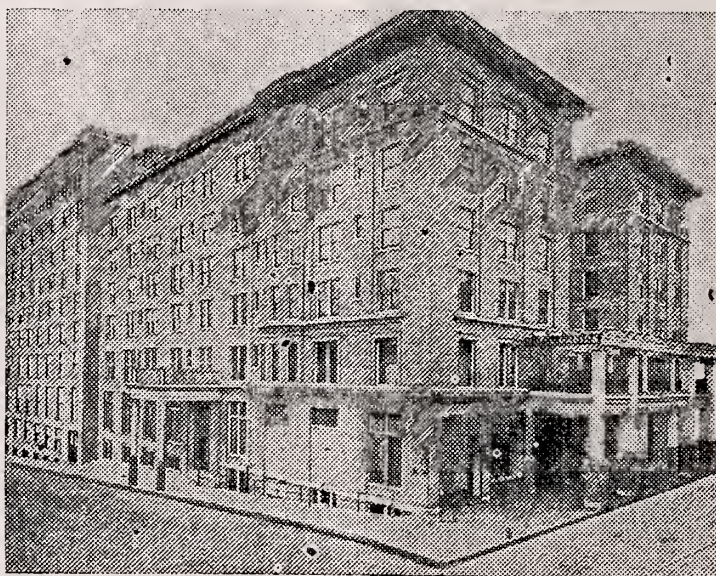
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ETC.

HEADQUARTERS FOR ALL CONVENTIONS

In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

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No. 12

Original Articles.

CLINICAL LECTURE — DERMATITIS EXFOLIATIVA.

Wm. R. Bathurst, M. D., Little Rock.

The patient that I bring before you today has a generalized exfoliating inflammatory disease of the skin, a condition which is comparatively rare, but very interesting, especially as regards the onset of the eruption—namely, following an eczema which first made its appearance eight years ago on the inner side of the thigh, and equally as important and interesting is to have this opportunity of going over the differential points in diagnosis between this and other scaly skin affections.

Mr. E. D. A., of this state, nativity Germany, age 44, married, occupation, manager of a creamery.

Family History—His father and mother were healthy, and he has no knowledge of his parents or any of his family having had any disease of the skin, syphilis or tuberculosis.

Previous Personal History.—He says that he has never had any serious illness since childhood.

Habits—He very rarely uses alcoholic liquors or tobacco, tea and coffee moderately, and claims that he has never been in the habit of dissipating in any way.

Present Illness.—Eight years ago there developed a number of boils over his body; a few months later, as they disappeared, there developed on the inner side of his thigh a few red macules which soon formed a large inflamed patch accompanied by intense itching, and a sticky moisture, which by the use of some treatment disappeared, and each year since he has had a dry, scaly eruption in this locality. During the spring of this year he had over his body as many as a dozen boils,

followed a little later by a reddened, slightly scaly condition about the flexures of the arms and legs, with slight burning and itching, getting better and worse until four weeks ago, when it became universal.

Present Condition.—The entire body, including the scalp, is reddened and covered with large, thin, grayish slightly adherent scales. And as I remove a few scales by a little rubbing you will notice the underlying skin smooth, dry, red and shiny.

The hands, which were the last portions of the body to become affected, are somewhat swollen, the ends of the fingers a little tense, and have a feeling of coldness; in addition, the scaling here tends to be more of a shedding or a thick peeling of the epidermis. The nails are not as yet affected. The scalp is covered with scales and a loss of hair is noticed. The subjective symptoms are slight. The patient tells me that at times only there is a moderate itching with possibly a feeling of tension. His wife says that the amount of scaling after a night's rest more than fills a quart cup. In a general way, he is in apparent good health and says he feels about as well as he ever did. He has a healthy appearance; weighs 180 pounds; and not subject to such ailments as sore throat, rheumatism, headache or constipation, his tongue now is dry, with a slight brownish coat. Examination of the urine shows specific gravity 1030, no sugar, no albumen.

Etiology.—We know very little about the cause of this disease; most cases are seen in gouty or rheumatic subjects.

I think it is reasonable to assume that the cause of this disease is due to the presence of a toxin resulting from faulty metabolism, and as I have said before the skin is an excretory organ and its elements may suffer in endeavoring to remove imperfectly formed waste products. Local irritation from drugs, especially chrysarobin, arnica and the mercur-

rial ointments have been known to provoke a general exfoliative dermatitis. The ingestion of quinin and antipyrin has been responsible for some cases. The disease is most frequently seen in men between the ages of forty and sixty years.

Pathology.—Various histological examinations are recorded which show that it is dependent upon the persistence of the disease, being at first simply an inflammation of the skin. In advanced cases we find the whole depth of the skin is involved with inflammatory and atrophic changes, pigmentation, hyperplasia of the elastic fibre bundles, and complete obliteration of the appendages of the skin.

Diagnosis.—In well-developed cases like this there is rarely difficulty in the diagnosis. The exfoliative symptom without systemic symptoms or throat involvement will serve to differentiate it from scarlet fever and from erythema-scarlatinoides. The affections most likely to be confounded with it are psoriasis, squamous eczema and lichen ruber.

Dermatitis Exfoliativa.

1. Usually universal and rapid in its evolution.
2. Slight infiltration.
3. Scales large, abundant, grayish and slightly adherent.
4. Beneath the scales is a smooth red surface.
5. Usually it first attacks the flexor surfaces.

Dermatitis Exfoliativa.

1. Invariably generalized.
2. Slight infiltration and thickening.
3. Usually dry and with abundant exfoliation.
4. Itching moderate or absent.

Dermatitis Exfoliativa.

1. Pronounced scaling.
2. Rarely material thickening.
3. Skin lighter red in color.
4. Usually appears first upon the trunk and extremities.

Psoriasis.

1. Rarely so completely universal and slow in its evolution.
2. Considerable infiltration.
3. Scales small, less profuse, silvery and more adherent.
4. Beneath the scales is a rough whitish red patch.
5. Usually it first attacks the extensor surfaces.

Squamous Eczema.

1. Practically never over the entire surface but in large sheets or areas.
2. A good deal of thickening and infiltration.
3. Moisture, or a history of previous moisture, and covered with sparse, small yellowish scales.
4. Itching marked and always present.

Lichen Ruber.

1. Moderately scaly.
2. More of a harsh, rough, thickening of the skin.
3. Skin of a darker red color.
4. The uncovered parts are usually first affected.

Treatment.—The treatment will consist of local and constitutional remedies. Internal treatment must be based upon broad, general principles, improving the tone of the general health, looking after the digestion and a regulation of the bowel movements. In severe cases additional efforts should be made to sustain the strength of the patient. Diuretics are to be given with the idea of relieving the congestion of the skin. External treatment consists of soothing applications. In this case for the beginning treatment I will give a calomel purge and keep the bowels well open with saline laxatives, and salacin in ten-grain doses three times a day. He is to take daily a warm alkaline bath made with one-quarter pound each of bicarbonate of soda and of starch to about twenty gallons of water. And apply four times a day the following prescription:

Acidi carbolici, ʒii.

Pulv. zinci oxidi,

Pulv. calaminae,

Lanolini, aa ʒi.

Aq. calcis,

Ol. olivae, aa ʒ viii.

This application, if well prepared, is somewhat thick, of a creamy consistence, and when applied forms a good coating, and is best applied with a soft varnish brush.

Prognosis.—The prognosis of this case, like that of others following psoriasis and eczema with no constitutional involvement, is usually recovery, although some of these may succumb in future attacks. The development of internal complications in the severe cases of the disease tends slowly but almost inevitably to a fatal termination.

CHAIRMAN'S ADDRESS—MEDICAL ASSOCIATION OF THE SOUTHWEST —SECTION ON SURGERY.*

J. A. Foltz, M. D., Fort Smith, Ark.

In accordance with an established custom, it becomes my duty, as chairman of the Section on Surgery, to deliver to you an address, and it is with due appreciation of this responsibility and my own shortcomings that I am venturing a few remarks for the "good of the order."

Let me say to you that while we constitute the Section on Surgery, yet, first of

*Delivered before the Medical Association of the Southwest, San Antonio, Texas, November 9-11, 1909.

all, we are doctors, disciples of Aesculapius, members of the profession of medicine, than which there is no nobler calling on earth, the ministry not excepted.

It is impossible for any man, or set of men, to attain the highest degree of proficiency and perfection unless they feel in their inmost hearts that the cause for which they labor is a glorious, good and righteous one.

It is not enough that they shall love their work; they must respect, honor and revere it; and when from any cause or combination of circumstances a society, organization or profession loses sight of those high, respect-commanding principles for which it stands, and allows selfishness, desire for fame and greed of gain to become its attributes, then no longer can the members of that profession have for it the veneration, love and respect which in its purity it commanded and of a right did have.

Now, the facts remain, after all the witticisms have been passed, all the slighting remarks made, that in every walk of life the doctor is honored, respected and loved. He shares with us the happiest and saddest moments of our lives.

“When in the cottage blessed with Love’s
sweet store

A babe is born, and o’er the rustic door
Is hung the crown of motherhood, and fair
Is all within—the Doctor’s there.

“When ’neath the pall of mystic Death’s
weird spell

A mother’s heart is broken by the knell
Of all that’s dear, and on the stair
No baby feet—the Doctor’s there..

“When Virtue flees and breath of ruthless
Lust

Eats into souls as does the gnawing rust,
When no one else with Her the shame can
share,
With father’s touch—the Doctor’s there.

“Where blossoms Life’s sweet Bud at blush
of day,

Where withered Rose at evetide steals away
On the Southwind—in joy and care,
An uncrowned king—the Doctor’s there.”

Aye, and there is the point that lends sublimity to achievement—bearing the cross without hope of the crown; working for the good you may do; not for the glory you may obtain.

Did you ever stop to think that of the thirty-three recorded miracles performed by the Great Physician of Nazareth, twenty-four were for the relief of human suffering?

The prolongation of human life, the relief of pain, the substitution of joy for sorrow, these are the purposes and principles of the profession of medicine, and it is our sacred duty to keep these principles inviolate.

Are we doing all in our power to this end? Let us see.

By what process of reasoning can an editor of a medical journal supposedly standing for the best interests of the medical profession, and, therefore, of course, for the high ideals which it represents, reconcile these interests on the one hand and the interests of a dishonorable, disreputable and lying proprietary on the other?

I say with humility and shame that I have on the table before me copies of several of the leading medical journals of this section of the country boldly setting forth the value of Antikamnia in la grippe, Anasarcin in dropsy, and others equally bad. It has been proven beyond cavil that these firms have misrepresented their products to the profession; have deliberately lied about their composition, and have made therapeutic claims for them that had not the slightest foundation in fact.

Shades of Aesculapius! Can it be possible that these medical journals are betraying our beloved and honored profession for money? If so, Judas Iscariot, when he betrayed his Savior with a kiss and for thirty pieces of silver, was not more of a traitor than are they.

The American Medical Journal, and many other journals, have refused this kind of advertising. The Journal has done, and is still doing, a noble work in exposing these vultures, who with the assistance of some of our medical journals live off of the gullibility of the doctors who support both them and the publications which advertise them. And yet, after all of this exposure and proof undeniable of the misrepresentations and fraud of these proprietaries, still, certain journals continue to carry these advertisements in one section of their paper, and to speak high-sounding of ethics in their editorial columns.

Now, we are also unwittingly lending our aid to this nefarious business, and I think it is our duty to put a stop to it, and it is thoroughly within our power to do so.

Dr. R. M. Parker of Chicago, writing in the Illinois State Medical Journal for April, points out the fact that no medical journal can live without scientific contributions from surgeons and other specialists, and that if these men would refuse to contribute papers to these journals which carry objectionable advertising, then the advertising would begin to decrease in a most marvelous way.

Gentlemen, I think that the distinction of taking some decisive step in this matter should belong to the Medical Association of the Southwest, and should emanate from the Section on Surgery.

I think we should stand forth manfully and say that we are too proud of these children of our intellect to see them associate with Antikamnia, the pain killer; Anasarcin, that instantaneous reliever of all dropsical conditions, regardless of cause, and Phenalgin, that wonderful coal tar derivative, composed chiefly of acetanilid, which positively stimulates the heart, and sells for two dollars an ounce! Would they be in much worse company if they were to play with Hostetter's Bitters, and the temperance ladies' favorite, Peruna?

Let us clean up our press so that we can be as proud of it as we are of our profession.

There is one other practice which I cannot pass without uttering a word of protest and warning. That is, the division of fees.

This custom was exposed and scathingly criticised by our esteemed confrere, Dr. Bacon Saunders, in his address before this section last year. Every word he said was true, and should have our hearty endorsement.

Certain members of our profession of doubtful prominence, however, for the last five years have tried to bolster up this practice with excuses and explanations, offering ingenuous arguments in its favor; but, gentlemen, the fact that those who practice this custom need these arguments and explanations is in itself proof positive that the thing is wrong, and that they are really ashamed of themselves and are merely trying to bluff themselves and others into thinking it is all right.

Whenever you find a man in any walk of life explaining and excusing his position, you may depend upon it, the explanations are needed. If a man does what is right and square and honest, you will not find him around explaining, and the sooner this custom is frowned down upon by all respectable surgeons and relegated to the domain of the

charlatan where it properly belongs, and from whence it originally sprang, the sooner it will be dropped by our weaker brothers to the great enhancement of our own self-respect, and no doubt, ultimately, to our financial gain.

These two things which I have brought to your attention will serve to point us a lesson—that of organized medicine and of meetings such as these.

It is here we profit by each other's ideas, and try the metal of each other's blade. It is here we clasp each other by the hand, at the table, on the cars, or in the lobby of the hotels, and learn to know and appreciate the man, as on the floor of this hall we learn to know and appreciate the ability of the surgeon.

The many evils which are borne and which would grow to be lusty giants before we were aware of their presence, are here discovered and buried in their swaddling clothes.

Here the doctor from Arkansas meets the doctor from Texas and introduces him to the doctor from Kansas, and all three step in and take a glass of limeade together, and thus a friendship is born which grows stronger and more binding with each successive meeting, and any one of these three would be very loath to take a step which he felt sure the other two would condemn.

In no better way can we promote high ideals in our profession than by good fellowship based on pleasant social intercourse.

The mintage of wisdom is to know that rest is rust; that real life lies in Love, Laughter and Work. Not all in Work, mind you, but in the combination, Love, Laughter and Work.

We are all interested in elevating and perfecting our beloved profession; we would willingly make great personal sacrifices to this end. Can we devise a more glorious way of accomplishing this end than by uniting in all our professional life and relations with each other these three, Love, Laughter and Work?

If Love and Laughter could be made to take the place of Suspicion and Jealousy in thousands of our small communities in this country, how much more the people would think of the doctors, and how much more would the doctors think of themselves, and who can calculate the enormous influence for good that would result.

Can you conceive of a doctor with Love and Laughter in his heart making a proposition for the division of fees, or an editor of

a medical journal, actuated by the same principles, lending his influence to fake advertisers?

You all know the type of surgeon who says he is too busy to attend these meetings. He is seldom the busiest man in his community. The busiest ones go. The man who stays at home fossilizes. He depends upon work alone and becomes mercenary, and is denied the great educational advancement to be had through the exchange of ideas and the pleasant mingling of men.

For it is here at these meetings that Love, Laughter and Work are blended, and the pleasant memories of good old times and the softening influence of pleasant friendships and the calm satisfaction of work well done, and the new ideas absorbed and results accomplished, will sink into our hearts and minds and return with us to our various fields of labor and help us in our work.

A PLEA FOR MEDICAL INSPECTION IN THE PUBLIC SCHOOLS.*

Frank D. Boyd, M. D., Fort Worth, Tex.

I believe that I could find no topic more pregnant with timely good, even though I exhausted the whole archives of medicine, than to address you upon the absolute necessity of a medical inspection of the public schools. To achieve this we will have to work for legislation that will make the inspection possible and empower the inspector to have his edicts legally enforced. While many physical defects would be discovered, still so many would be found to fall within the lines of our special work that I feel we should particularly make an effort to accomplish this end.

There is no doubt as to the efficiency of medical inspection of the schools. This is proven by the fact that it has never been abandoned where it once has been started. In every community where it is in force the demands for better and more thorough inspection are cheerfully met with increased appropriations with which to do the work. I am convinced that the inspection actually costs nothing, for all statistics show an enormously increased capacity for work in children relieved of the diseases and conditions that inspection tends to correct. This in-

creased capacity of the children relieves the teacher of much needless work and this time can be devoted to more classes.

This subject is extending in interest so that the lay journals are devoting many pages to these most interesting articles. They are doing a great work in moulding public opinion and thought along these lines, thus creating a demand for inspection, and this will make it all the easier for us to obtain inspection and have it enforced. The Technical World for June has an article along this line and I believe the illustrations are finer than any I have ever seen in a medical publication. Dr. Alva Davidson of Lafayette College, Pennsylvania, has written most interestingly in this article and briefly covers the communicable diseases and parasites usually found among school children.

Medical inspection has been practiced in Europe for many years, but it has been in America less than twenty years and only within the past ten years has it begun its present stride. It has been in force in Japan for ten years and within that time there has been a great decline in the death rate.

From the statistics at hand we learn that there are in American schools over a million children afflicted with adenoids and tonsils. These children are all a drawback to their classes and most of them are one or two grades behind the average child of the same age. In our own Southland we have several hundred thousand cases of hookworm sufferers and while these are not all children it is but a question of time until we have several hundred thousand others infected by this germ of laziness that destroys all vitality, all ambition and makes mental improvement out of the question.

Just think what it means to the others to have 15,000 cases of contagious eye diseases excluded from the schools in one city in one year. This is what happened in New York city and not only that, but 65,000 others were denied school attendance while suffering from other communicable diseases. In some cities the percentage of defective vision has run as high as 60 per cent. The cases of impaired hearing found by the inspectors is appalling.

Those who think that the necessity for the use of the fine toothed comb passed when the intimate relations between the "old black mammy" and "little master or mistress" were severed by the Civil war are not familiar with the present conditions in our city

*Delivered before the Medical Association of the Southwest, San Antonio, Texas, November 9-11, 1909.

schools. *Pediculosis capitis* is exceedingly common, especially among Russian Jewish children. In my home town last session one of the ward teachers was at her wits' end to remedy this condition among several of her pupils. She could not make the parents understand, as they could not understand English. In her desperation she sent for a rabbi, but when he came she saw lice in his beard and she knew it was no use to appeal to him.

Our children have no protection, for the health officers can offer them but little defense from diseases, and in the cases where he has power it is so very limited it is almost of no avail. He can placard a house, but cannot enforce strict quarantine, and if a patient owns the house in which he is sick it is impossible to remove him to a pest house.

Not only should the inspection be medical, but dental as well. Every child should have his teeth examined and should be taught the necessity of the daily use of a toothbrush of his own.

As before stated, over a million children in this country are having to make an unnecessary struggle for each breath, due to the encroachment of tonsils and adenoids, several hundred thousand are the victims of hookworms, thousands and thousands do not know the use of a personal toothbrush. Who can tell the number that have barely enough teeth to carry on an imperfect mastication? Many there are who have carious teeth, filled with putrefactive material which infects each bite of food. God only knows how many there are whose vision and hearing are so imperfect that they lose most of the benefits of school attendance.

Tuberculosis exists more frequently than we suspect and these children are allowed the full freedom of our schools, and, mingling with the other pupils, they spread this dread scourge.

I could extend this recital until you were weary and still not touch the mass of terrible conditions that medical inspection has revealed and ameliorated, if not corrected, wherever it has been instituted.

The members of this association are engaged in practice in five of the coming states of the American republic. Our states are making wonderful progress and we cannot afford to sit idly by and watch this movement come rolling toward us and only work for these things when not to have them were to be a disgraced state among states. If these

thoughts and statistics have made enough impression on you to accompany you home and there cause you to go to work investigating for yourself and doing all you can to obtain medical inspection in our public schools, then indeed will I feel that this is one great day in my life.

SYNOPSIS OF THE ANNUAL COMMENCEMENT ADDRESS, MEDICAL DEPARTMENT UNIVERSITY OF ARKANSAS, MAY 2, 1910.

By Dr. Charles Hillman Brough, Professor of Economics and Sociology, University of Arkansas.

I appreciate very highly the honor of the invitation extended by my friend, Dean Lenow, to deliver the baccalaureate address before the medical department of the University of Arkansas, which, established in 1879, during the thirty-one years of its eventful and useful history, has sent four hundred and seventy-five graduates out to alleviate human suffering and make for higher citizenship in our glorious commonwealth of Arkansas. The medical department of the university is to be congratulated on having as its guiding genius such an able and consecrated man as Dean Lenow, supported as he has been by devoted and self-sacrificing collaborators, who have given generously of their time and talent to improve medical conditions in our state. The time has come, in my humble opinion, when Arkansas should appreciate the great work that is being done by its premier medical college, and should support this department of the university by legislative appropriation or by a special tax levy. Seventeen state institutions of the American Union are supported by special tax levies, and in states like Ohio, Indiana, Illinois, California, Wisconsin, Kentucky, North Dakota and New York, where the experiment has been tried, it has proven uniformly successful, and has resulted in better institutions of learning and higher educational ideals.

The time has come in the educational development of Arkansas when our university, in all of its departments, should be taken out of the cauldron of politics and no longer be used as a legislative football, to be kicked about on the gridiron of practical politics. And the time has already come when the state should awake to a realization of the

great work being done by the medical and law departments of its university, which, with a paltry matriculation fee of \$75.00, has practically educated over 4,000 physicians, who have gone to every nook and corner of the United States to bless the world by their humanities. It is worthy of note that twelve of the full professors of the medical department, and practically all of the associate professors and instructors, are graduates of the university where they teach, and that at least two of the graduates have achieved national reputations—one by his bacteriological researches and the other by the discovery of quinin anesthesia.

In the history of human progress no body of men have rendered more conspicuous services than the great masters of medical research. By virtue of the genius of a Boerhave in clinics, a Virchow in pathology, a Morgani in anatomy, a Koch in tuberculosis, a Hunter, McBurney and Howard Kelley in surgery, and a Lister in anesthesia, the productive period of human life has been lengthened from twenty years at the beginning of the seventeenth century to forty years at the present time. In Shakespeare's time the fifties were venerable. "Old John of Gaunt, time-honored Lancaster," was fifty-eight when supposedly so addressed, and Admiral Coligny, murdered at fifty-three, is described by his contemporary biographer as a very old man. Today the genius of the physician is such that we reject Dr. Osler's theory that a person should be chloroformed on reaching sixty, and medicine, its handmaid, hygiene, and surgery have literally made it possible for a dying man "to wrap the drapery of his couch about him and lie down to pleasant dreams."

My conception of a good physician, however, is that he should be more than a well-trained expert, versed in the lore of his profession. He should be a useful, patriotic and Christian citizen as well. From the days of the doughty Diogenes, the pessimistic Elijah and the lachrymose Jeremiah has reverberated down the aisles of the ages, "Run ye to and fro and see if ye can find a man." The physician can be a great factor in the campaign for civic righteousness, for, entering as he does the most sacred precincts of the family circle, and coming in intimate contact with the leaders in our public affairs, he is in a position to exercise untold influence. Political and educational conditions in Arkansas are sadly in need of right-

ing. With a school term of only ninety-eight days in the year and a per capita appropriation of only \$4.78 for each educable child, or less than five cents a day, our state ranks forty-eighth among the states and territories of the Union. With the meager pittance of \$46.00 paid our common school teachers each month, Arkansas ranks twenty-third among the states and territories. Small wonder it is that 10.5 per cent of the white people above the age of ten in Arkansas cannot read or write, when such shameful "penny wise and pound foolish" economy is practiced by our citizenship with reference to our educational development. The duty of the physician, in this connection, is to use his influence to impress upon our citizenship the sublimity of the truth that

"We live in deeds, not years; in thoughts, not breaths;

In feelings, not in figures on a dial.

We should count time by heart throbs. He most lives

Who thinks most, feels the noblest, acts the best."

Young gentlemen of the graduating class, God has given you a great, undeveloped state in which to practice. New York has been called the Empire State of the American Union, because New York is the richest state in the Union. New York can boast of the russet of its apples and the cereal amber of its fields of wheat. Arkansas can boast of the fact that its apples have taken the first prize at the last five international exhibitions, and that the largest apple ever put on exhibition was one weighing twenty-six and one-half ounces, raised about five miles from Sulphur Springs, in Benton County. New York can boast of the fact that its magnificent \$7,000,000.00 capitol at Albany was constructed out of granite hewn within the borders of the state. Arkansas can boast of the fact that the first stone used in the construction of our new capitol at Little Rock was quarried a mile and a half from Batesville, Independence County. New York can only claim a small border of mineral land in the extreme western part of the state. Arkansas points with pride to the fact that there is enough coal in Sebastian, Johnson and Logan Counties, and enough natural gas on the Mazard Prairie, adjoining Fort Smith, to furnish fuel for generations yet unborn. New York is a heavy importer of foodstuffs and raw ma-

terial for manufacturing purposes. Arkansas has enough "razorbacks" fed on native acorns to fill the smokehouses of its farmers, enough rice on the Lonoke prairie to satisfy the most exacting Oriental epicure; enough alfalfa and timothy on its meadow lands to feed all the live stock that could possibly be raised. New York advertises its famous "skyscrapers" that tower as monuments to the genius of its captains of industry. Arkansas tells the world that its hills and valleys are dotted all over with the homes of a happy, free and contented peasantry. I trust that these twenty-six bright young physicians before me tonight will go out and tell their constituencies that the time has come to put behind us the miserable legend of the "Arkansaw Traveler," wearing his coonskin cap and coming to the fork of the road not knowing which fork to take, and that every citizen of this young and imperial commonwealth will exclaim with one acclaim:

"Henceforth, O Arkansas, we look up to thee,
Not down at other states;
Arise, arise, be not proud; be humble and be wise,
And bow thy head to the great, unknown Supreme One
Who, on high, hath willed that as a state
Arkansas shall never die."

And finally, young gentlemen, I urge you to use your influence to strengthen the faith of our fathers and mothers, a faith in Him who is the eternal rock of all the ages. It is to be regretted that President Eliot saw fit, shortly after retiring from the presidency of Harvard, to promulgate the doctrine of the "new religion," which completely eliminates the divinity of Christ, the idea of a supernatural, and denies the authenticity of miracles. There is no conflict between religion and science, between natural law and spiritual law; for the God of nature who disintegrates the rock, forms the human body, and unfolds the budding flower is at once the God of revelation who crushes the brute force of humanity and unfolds its Godlike nature. The geologist tells us that God so loved the world that he spent eons of time to prepare it for the habitation of his masterpiece. The evolutionist tells us that God so loved the world that he spent millions of years to perfect man, "infinite in faculties, and in form and movement ex-

press and admirable." The astronomer tells us that God so loved the world that he placed it in the center of the body of celestial spheres, so that the coming of comets would still preserve the cosmos in the divine order of creation. And the God of Revelation tells us that "God so loved the world that He gave his only begotten Son, and whosoever believeth on Him should not perish, but have everlasting life."

God grant you a baptism of intelligence, of good citizenship and of faith which will prepare you for the demands of the age upon which you are soon to enter. Then, like the unseen process in the coloring of the flower, will the professional and moral hue of our state blossom into tints that nothing but the chemistry of heaven could produce, given by a divine hand through heaven's cheerful ally—the skill of the modern physician.

ADDRESS BY DR. C. H. HOFFMAN, DELIVERED AT THE FOURTH ANNUAL COMMENCEMENT EXERCISES, COLLEGE OF PHYSICIANS AND SURGEONS, APRIL 29, 1910.

I have the pleasure and honor to welcome you here tonight in behalf of the faculty of the College of Physicians and Surgeons, in behalf of its medical and pharmacy students and graduate nurses. These young ladies and gentlemen have just completed their prescribed course and will be granted, as a reward of their meritorious study, their respective certificates this evening.

It is customary on occasions of this kind to impress the public with the wonderful things medical science is doing for its welfare, and to impress the graduate with the dignity and high ideals of the profession into which he is about to be admitted. The public is always interested in the achievements of medical science and has always cheerfully accorded the profession an honored and dignified place and looked to it for information as to how it can best preserve its health. I can not review here all the progress we have made, but will mention one of the most important achievements of scientific medicine. There is ingrained within us all, wrought into our innermost fibre, an abiding love of mystery and marvel. From the shadowy ages before the earliest glimmer of history, stories of the weird and wonderful have exercised a surpassing charm over the imagination of man.

It is a striking truth that science, in its triumphs hitherto, has been realizing one by one the fancies of fairy lore and magic. The picture that moves and speaks, the chariot that bounds like a fiery meteor through the air, the wizards catching each other's thoughts across the continent's space, all these have found themselves actualized in the phonograph, the kinetoscope, the electric car and the wireless telegraph.

Scarce a century ago these wonders have been deemed a fakir's story, and a century earlier the idea of a steam railroad, a sewing machine, a cotton gin would have ranked with the magic lamp of Alladin and the flying horse of Prince Ferize-shah.

When modern medical science dawned the world

was dark with superstition. Everywhere notions fantastic or barbarous fettered the human intellect. Witches, foul and hideous, that flew through the air or lurked about the threshold, waving with their bony hands the spells of death and ruin, black sorcerers, with their magic signs and incantations, who cast enchantment over the reason or changed to brutish forms the objects of their spite; astrology, with its traditions and dogmas, charms and amulets, with their transforming influence, omens with their ill-boding messages of blight and blood; these and other superstitions no less grotesque and crude held the common mind in thrall. In their place modern medical science has substituted the science of bacteriology, and the principles of prevention of disease by hygiene.

The belief, however, which exercised the greatest fascination over the inquiring minds of old was that which taught the possibility of lengthening out, far beyond the natural span, the years of man's sojourn on earth. Intoxicated with the idea, some sought under strange suns the fabled Fountain of Youth, whose magic waters should unbend the drooping frame and fire each failing sense with perpetual life. Others, less credulous, strove to wrest from alchemy the divine elixir which should yield this priceless gift. How singular, that the dream of the mediaeval philosophers should find an echo in the utterances of one of the greatest of modern medical investigators, one whose teaching and temperament is without a touch of mysticism, and whose thought is the crystalization of a lifetime of patient research! Elie Metchnikoff, the Russian bacteriologist, and successor of the great Pasteur in the French Institute, so long identified with the name of the latter, pronounces old age abnormal, and no part of healthy physiological function, and holds it well within the bounds of probability that in the fullness of time the life of man upon the planet may be indefinitely prolonged.

The ancients knew nothing of the larger truth of physiology and hygiene, being ignorant even of the circulation of the blood, but the modern student of the fascinating science, where he has paused to reflect upon the mystery which enveils the processes of life, has been struck by a singular phenomenon. From childhood to manhood and thence through the years of bodily prime, the heart and lungs and digestive machinery replace as fast as lost the wasted particles of the frame, but with the advent of old age, the vital processes begin to lag, the form droops, the eyes dim, and the whole organism falls slowly into decay. Why is it that the work of physical rejuvenation so perfect in youth and manhood does not persist far beyond the common span of life and that man's sojourn on earth is not reckoned by centuries? Bacteriology, the greatest legacy of medical science to the world, has let in the light upon this engrossing problem. In the eyes of a Pasteur or a Metchnikoff, the body of man is the theater of perpetual conflict. During every moment of earthly life, and throughout every limb and organ, a deadly warfare wages between the bacteria which battle for the preservation and renewal of the organism and the microbes which battle for its destruction, and old age, as the latter researches of Metchnikoff and his confreres would seem to show, is but the giving away of the defenses of the organism before the assaults of these swarming infusoria. If this be true, it needs but to learn the habits of these tiny pillagers of the frame and to curb and neutralize their action, when the prophecy of Metchnikoff and the beautiful fancy of the ancients flowers into fact. Who shall say that even this magnificent accomplishment is beyond the pale of possibility when we recall all the splendid conquests already won by medical science over the primal forces of nature.

One of the fruits of modern medical endeavor, sanitary science, is teaching us that the length of life is increasing wherever it and preventive medicine is applied. In India, for instance, it is stationary. In Europe it has doubled in three and a half centuries. The rate of increase during the seventeenth and eighteenth century was above four years per century; during the first half of the nineteenth century, about nine years per century; during the latter half of the nineteenth century, about seventeen years per century, and in Germany, where medical and sanitary science has reached the highest development, about twenty-seven years per century. Fifteen years could be added at once to the average human lifetime by applying the science of preventing disease.

The public should be proud of the profession which is trying to rid the world of disease and suffering, and increase the life span of the individual. You should consider yourself honored to be inscribed a member of that profession, for this is your birthday as doctors of medicine, your introduction into a new life, and the assumption of new duties and responsibilities. Henceforth your actions are in the limelight of the public observation, and your character will be tested in the crucible of public opinion. Henceforth you will be servants of the people. All true men are agreed that an honorable profession is something more than a mere bookkeeping account with the public, where dollars and cents are the sole measure of personal relations and confidences. All professional men—judges, lawyers, preachers, doctors—are servants of the people. The history of medicine is too long to review. Its achievements too grand and superb to extol in the brief space of time allotted to an address of this kind. I will, therefore, address you from the text that "We are all the servants of the people and must labor for the common good in order for our labors to be crowned with success." In the seventeenth century the profession of medicine had reached a low ebb in Europe, and particularly in France. The books of that age, whose thought was merging from medical mysticism into the phlogistic theory, were characterized by their emptiness. Everywhere ignorance and blind obedience to the dogmas of their forefathers prevailed. The medical profession was infested with men who possessed such concealed bigotry that they rested content in their belief that their calling was an exact science. Their sanctimonious pedantry inspired the great Moliere with an inexhaustible fund of resources for his comedies. In 1664 he made his first attack on medical men, *L'Amour Medicin*, and from then on until 1673, when he was fatally stricken in the midst of a speech while acting a part in his drama, "*Le Maladie Imaginaire*," he continued to assail the doctor with relentless vigor. Moliere snatched from the physician's shoulder their stock in trade, their cloak of occultism, and left them standing naked in the spotlight of his ridicule. Moliere was a great civilizer. His inimitable satire produced a general reform in much that was unworthy and superficial at that period in Europe. He, almost single handed, spurned the besotted egotism of the doctor into a healthy growth of regeneration. A century after Moliere's death, the French Academy voted that his bust should be placed in its hall, and that there should be inscribed thereon these words: "For his glory there is nothing needed. He is needed for ours." We of the medical profession may well take the application personally. To Moliere we owe the same debt of gratitude that we owe Samuel Christian Hahneman of the eighteenth century. His teachings enabled those in the advance guard of our profession to applaud Oliver Wendell Holmes when he said: "If a shipload of miscellaneous drugs,

with certain very important exceptions, drugs which many of them were often given needlessly and in excess as then used, could be sunk to the bottom of the sea, it would be all the better for mankind, and all the worse for the fishes."

Thanks to the reforms instituted, all went well for the doctor for a certain time. So well, in fact, that today we are threatened with a greater supply of medical men than the demand warrants. In the fierce competition, there is a tendency for commercialism to lay her hand heavy upon many of us and to tempt us from the narrow and less lucrative path of strictly square dealing with our patient. The critical mind of the casuist finds everywhere the earmarks of a needed revolution.

In recalling our gratitude to Moliere, and to Hahneman, we should not forget the neurotic old lady who, during her period of arteriosclerosis, reigns supreme in the "Mother Church" and with an absent treatment cures hundreds of thousands who are laboring under *Le Maladie Imaginaire*. This old lady Eddy has come to us in the nick of time. She is obliterating the least fitted of us, because she is creating a decreasing need for our existence. At the present time both the medical profession and the laity are suffering. The laity, drunk with the wine of regenerated theory, are overconfident. That Nestor of Medicine, Oliver Wendell Holmes, contended that ninety out of every hundred patients would get well if they were let alone.

Ergo, we are needed ten times out of a hundred, and needed badly. The science of medicine is preventative medicine. The art of medicine consists in assisting nature before the disease has gained too great a headway and the disciples of "errors and claims," recognize symptoms in the majority of instances when it is too late for the art of medicine to be utilized. The laity must then pay the penalty.

The doctor of today is suffering because of lack of patients, particularly the city doctor. His honesty of purpose is often doubted because others of his confreres have been weighed in the balance and were found wanting. Our periodicals of today must be reckoned with as a powerful factor in moulding the public mind and shaping its mental viewpoint.

They are writing the up-to-date technic of asepis, why it is necessary and what it accomplishes. They are giving the scientific etiology of certain diseases, the diagnosis and prevention. They are quoting the chemistry of the more common drugs in use and are exposing secret medical formulas. The laity are beginning to watch their doctors with critical eyes. All the force of his high-sounding diagnosis goes by default, and they recognize his culpableness when he forgets to wash his thermometer before he has placed it in their mouth. They are beginning to comprehend the need of coöperation with their medical advisers. They are demanding blunt honesty from him. Like a jury of twelve good men and true, they want simple terms and comprehensive language.

If we expect for society to take cognizance of us, we must educate society and instruct it as to its hidden enemies. We have been constantly demanding protection from it, but are we protecting it?

So when you enter the practice of your chosen profession, you must demonstrate to the community in which you locate that your advice and teaching can be of untold value to it. You must consider yourself a servant of the public.

It is your duty to enlighten the public that it is wrong for tubercular individuals to marry and to beget children who are predestined to suffer and can be naught but an expense. You must teach our young men that sexual diseases are worse than an ordinary bad cold, and that they may sound the death knell of a loving wife and mother, or

blind and innocent babe for life. It is your duty to instruct them on the dangers of narcotics, and show them by objective lessons what their habit means. You must tell mothers that it is wrong to give babies paregoric, whiskey or nostrum preparations containing these; that it makes them drunkards or dope fiends for life, and wrecks their nervous organization. You must acquaint them with the fact that the majority of diseases are preventable; that tuberculosis, malaria, typhoid fever, syphilis and other diseases exist only on account of the indifference and ignorance of our legislators. Proclaim to them that for every death saved from typhoid fever, that is by preventing the individual from contracting the same, two or three deaths are saved from other diseases. Teach them the habits of the hookworm, the mode of infection and what hygiene does to prevent it.

It is high time that we would all recognize our duty as servants of the public and that we combine our efforts as physicians, and insist upon proper sanitary legislation, and the education of the masses along this line. We must insist that sanitary education is one of the first duties of the state. Since our legislators are so indifferent, it is your duty to create an inspiring enthusiasm among the masses, and make them demand it from their lawmakers. It would require the appropriation and expenditure of but a small sum of money biennially to place the State of Arkansas in the best obtainable sanitary condition. One in which the citizens instructed by their physicians would vie with each other in improving and maintaining. Then indeed will the loss sustained from the numerous dens of robbers and murderers which infest the State of Arkansas and known by the name of dangerous and communicable disease germs, be far less than that from human kind. Thousands of dollars are paid out of the public fund every year to persons employed to hunt the latter, and, after they are caught, thousands more are expended in trials, conviction and maintenance. In many cases the loss sustained from one or more of these by an individual would not equal one-fourth of the loss sustained by a mild attack of typhoid fever. If the actual loss to the citizens of Arkansas from tubercular and other preventable diseases each year were converted into dollars and cents, it would exceed by hundreds of thousands of dollars the loss from murderers and thieves. If you and all the physicians of this state, as the servants of the people, and as having their interest at heart, would present them to its citizens, we firmly believe the people ere long in their might would rise, demand and receive from the legislature at least as much protection from the ravages from dangerous and communicable diseases, as is now given them from the human murderers and thieves.

A railroad accident causing the death of one person is investigated by the coroner in any county in this state, and money is available for such an investigation where the cause of death is plain, but the fact that over 3,500 people die in this state annually from diseases that are preventable does not call for a single investigation on the part of anyone as to their cause. Our last legislature in the munificence of its benevolence appropriated close to a million dollars for the completion of the state capitol building, so that its state officers might have a respectable domicile, but it failed to appropriate one single cent for the State Board of Health, so that the citizens could be protected from the ravages of communicable and thereby preventable diseases.

Gentlemen, never in the history of medicine has the question forced itself upon the profession as does the one which now confronts you as you enter its threshold. The world has moved up to it and demands that we who occupy the stage in the open-

ing of the twentieth century reform our profession, and instruct the people and protect them against the losses from preventable diseases. And then the doctor will again come into his own and enjoy the confidence of the people, and then they will erect a monument to our profession, bearing that famous inscription changed, "For their glory there is nothing needed, but they are needed for ours."

The pendulum may swing further on for a few years yet to come. When it reaches the center we will find that the masters of medicine from Hippocrates to Osler have not lived in vain. Certain barnacles on our platform will have cleared away. The profession of medicine will have passed through another process of purification, and in the process of evolution, the science of medicine will have gained precedence over the art of medicine.

The survival of the fittest will find that there is no room for those who have not entered fully into the new era that awaits the medical man and demands foremost from him that he be a humanitarian, a teacher and a public servant for the common good. There will be no place for the doctor who traffics or ignores the potent effect of the mind over matter; no place for him who speaks or writes in symbols; no place for him who is governed by the selfish law of commercial trade.

Intimately related to the profession of medicine, sharing its triumphs and bearing its burdens is that of pharmacy.

The practice of pharmacy and the following out of all the teachings the profession presupposes the existence and work of the physician. Without his coöperation the profession of pharmacy as a separate and distinct science must of necessity cease to exist. On the other hand, the profession of medicine as a distinct and separate science would be impossible of existence on its present high plane of development without pharmacy to aid, to assist and point out the shining way in some of her darkest hours.

Then, since each is in a large measure dependent upon the other, it is of the utmost importance that the members of each profession be as cordial in their relations as possible, each sometimes forgetting self and working wholly, as all public servants should, for the common good.

"Every man to be successful must have high ideals."

And as your ideals are, so will your position in the community be. The world is a good judge in the long run, and your measure is usually pretty fairly taken by the public. Every man has an ideal plan for his business, whatever may be his line of work. Many cannot tell what their plan is, but, if it be outlined, they will recognize it. It may not be practical, but it is nevertheless a plan. Environment may modify it; may even overthrow it.

Ideals in business must change as conditions change; yet there are some underlying principles in the profession and practice of pharmacy, which will not change as long as the world lasts. The truth must be told and knowledge gained by investigation, and experience must be shared by pharmacists if there is to be an ideal profession of pharmacy.

Pharmacy, to exist as a profession, must be profitable, and this profit must be obtained from the public, your customers. If you want their confidence, you must stand in the community for knowledge, care and honesty, for in no other business will ignorance, carelessness and dishonesty produce more direful results than in that of pharmacy. You hold the life of the community in your hands. You are its servants.

Ideal communities, however, cannot be developed on the surface. They are not the growth of a day nor of weeks, nor of a lifetime, but are developed

through proper training, education and experience passed on from generation to generation.

Nothing has ever been accomplished toward the elevation of pharmacy and the business of pharmacy which has not depended upon high ideals professionally and commercially, and had for its ultimate outcome the betterment of mankind. If we study the drug business from its incipency we can determine some of these ideals. I will advise you to read the objects of the American Pharmaceutical Association, and learn what ideals are uppermost in the minds of this select body.

If you look about you may see to what extent these ideals are realized in actual practice. The inception of the Pharmaceutical Society is a step toward the ideal. Standardization simply means measuring by the ideal. For over fifty years some of the leading pharmacists have considered themselves as public servants and labored for a pure food and drug act, and by its accomplishment June 30, 1906, a long step was taken toward the ideal. This act marks a new era and already means advancement for the druggist. I might mention to you to avoid those things which are not ideal—the dirt, waste, dead stock, cut rate, poor quality, poor buying, lack of trying, etc. But I would far rather suggest the high possibilities.

Conduct your store on ethical and ideal lines. Do not become the sellers of liquor, except for legitimate purposes. We who have studied the temperance movement, who realize that it presents no temporary spasm of public virtue, who understand that it is a great world force that will continue to exert itself with ever increasing power, even though it suffers occasional setbacks, to us it is apparent that society will not tolerate the practical nullification of its purposes by those pharmacists or pseudo-pharmacists, who abuse their privilege and sell liquor shamefully and without moral restraint.

Avoid selling opium, morphin and other habit-forming drugs, except on physicians' prescriptions, and do not advertise fraudulent medicines.

Constantly bear in mind that you are the servants of the public. There have been in your profession noble examples of self-sacrificing souls, who have pursued science through great discouragements, privation and toil, and who have left behind them an undying fame. You will find much in their lives to emulate.

Live up to the best that is in you; live up to the ideals of the founders of American pharmacists. Live up to what may be rightly expected from you by the community at large, and then you will be servants of the people in its highest application and truest sense.

When the practice of medicine consisted chiefly in dosing with drugs, the convenient relative or generous neighbor could follow the attendant physician's directions and do the nursing. With the progress of medicine the patient, rather than the disease, became the object of the treatment. It was found that more personal attention must be given to the sick—something besides dosing and sitting up at night.

And since the doctor could not spend all of his time in observing the patient, the demand for trained nurses grew, and this want was supplied for a time by the experienced nurse. She was poorly paid, and, though she rendered the best service possible and was a great improvement over the old order of things, she could not meet the demands. With her experience, and with such training as physicians for whose patients she cared could give her, added to her equipment, her services became valuable. Her power of observation, however, being untrained, her empirical knowledge fell short of demands, and the necessity arose for a trained nurse. The increasing proficiency of the trained nurse, due to her painstaking preparation and study,

has developed the profession well worthy of the title of a graduate nurse.

The evolution, however, did not stop here, for now the graduate nurse, after a few years of experience, takes postgraduate study and fits herself for the most responsible positions in institutions or well-salaried positions with successful physicians and surgeons. The demand for nurses today is so great that a very large number of untrained, or partially trained, nurses are kept busy. Some of these experienced nurses.

We have endeavored to give these girls the best of training. They have had the advantage of practical hospital training, with didactic lectures delivered by this faculty. In addition to the studies usually pursued, we have given them practical courses in psychology, symptomatology and hydrotherapeutics, massage hygiene and physiologic chemistry in so far as it relates to hygiene, sanitation and dietetics.

We have realized the importance of a working knowledge of psychology as an essential to a well-trained nurse. She needs it in the management of her patient, and the patient's family. She needs it to back up her intuition. She needs it to read the wish or intention of the doctor she is serving, and she needs it perhaps most of all to help her know herself, to recognize her limitations and to make full use of her powers.

We have trained them thoroughly in dietetics. We have realized that a good nurse ought to know every step in the preparation of food from field to factory, through the market, kitchen and dining room to and through the alimentary tract. We have taught them that to be able to please the palate is more important than to please the liver. We have taught them the effect of heat and cold on the various foods, particularly meats and vegetables.

In connection with their studies in physiology we have given them a concise, sensible course on the subject of sexual hygiene. Leading physicians, scientists, statisticians and economists, are reaching the conclusion that the only solution of the vexed sexual problem lies in the slow process of education. Because of this fact, and because her influence will allow her to incidentally distribute such information, we have made the course practical.

We have impressed these girls that they are also public servants, and we have educated them, not only because such education equips a woman for nursing, but because it equips her for living. It makes of her a moving educational center. It increases her domain of usefulness, and allows her, aside from doing reconstructive or restorative work for her patient, to do by example or precept real constructive preventative work.

And you, young ladies, in presenting you with the well wishes of this faculty, I desire to admonish you not to let your mercenary spirit be too strong, but, as true servants of the public, to do some constructive work. Do not consider your work done after your patient has been attended to, but give your heart and soul to the service of the great profession which has for its aim the alleviation of human suffering. You all in your chosen professions need ideals to spur you on, ideals to keep you out of the ruts of egotism! He who labors without them grovels in the dust of his mechanical workshop! Eternal vigilance is the price of success! Honesty, integrity and high ideals, its guiding star! Rufus Choate once remarked, "The successful lawyer's vacation is that space between the question put to a witness and his answer." Only another way of saying, "Keep eternally at it." In speaking of the weather, the late Mark Twain said: "People are always talking about the weather, but never do anything." It is time now for you to do something.

Deeds, and not words, bring results. To do more and be more or to do less and be less is compulsory. All things retrograde which do not advance, is an axiom that applies to the college as well as to the individual. Let us, then, with honest enthusiasm, without form and without ceremony, feel that it is a great thing in our continuing life, that we are permitted to do, and that perchance our efforts may be regarded, a shining crown engraved with the magic word, "Success."

My brief professional life has taught me, and a careful study of the lives of other men and of other times has shown me, that the essentials of success are everywhere the same; that they consist in preparation, in labor, in high ideals and in submission to the Divine will.

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Edited by
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All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the State. Notice of deaths, removals from the State, changes of location, etc., are requested.

ADVERTISING RATES.

A schedule of rates will be furnished upon request.

CHANGE OF ADDRESS.

Change of address will be made if the old as well as the new address be given.

ANONYMOUS COMMUNICATIONS.

No anonymous communications will appear in the columns of this Journal, no matter how meritorious they may be.

NOTICE.

All communications for publication in the Journal should be addressed to the editor, 308 Southern Trust building.

Editorials.

As we go to press the thirty-fourth annual meeting of our society is in session with every prospect of a good attendance, and an interesting meeting is anticipated, the proceedings of which will appear in the June Journal.

The meeting of the American Medical Association in St. Louis, June 7-10, should have a great many Arkansas physicians present, and it is to be hoped that all will attend who can.

The commencement exercises of the Physicians' and Surgeons' Medical College and Hospital were held April 29, there being twenty-nine graduates in the medical department—six in pharmacy and fifteen nurses.

The medical department of the Arkansas University graduated a class of twenty-six on May 2.

ARKANSAS TO THE FRONT.

What I wish to speak of chiefly this month is not national politics, but Arkansas. On the second Monday of next September Arkansas will vote on an initiative and referendum constitutional amendment. This means much to progressive minds all over the country. The good people of Arkansas have never had so good an opportunity to prove their faith in true democracy. This kind of an amendment has, in recent years, been submitted in eight states, and has never been defeated. The majority has sometimes run as high as eleven to one in favor, and we want Arkansas to make a record of 100 to 1. The only danger is indifference and lack of information. If the good people of Arkansas are informed of this grand opportunity to serve the interests of pure democracy, they will do their duty. The task is to get this information to them. This problem has been weighing upon my heart for a long time. If I could, I would go right down there and stay till September, and endeavor to rouse the people of every county in that great state. But my work is here, so I will have to work from this end, but I will ask every doctor in Arkansas to work with me and for this great cause.

A copy of this issue of The World will go to every doctor in Arkansas. There are 2,535 doctors in Arkansas; 533 of them are World subscribers. I would willingly give 2,000 World subscriptions to have the people of Arkansas do their duty as they should next September. The importance of concentrating on Arkansas at this time is not to carry the amendment. It will be carried all right. But the object is to carry it with such an overwhelming majority that it will be an example to the other states, particularly the other Southern states. A majority of 100 to 1 in Arkansas this year will make our work easier in every other state next year, and in future years, until the people have their "Magna Charta" in every state in the Union; and then we can talk about the use of direct legislation by means of the initiative and referendum in national affairs. Every state which we gain will be one more step toward true self-government in this great country.—The Medical World.

PEELING PEACHES WITH LYE.

As the canning season approaches, an earnest effort is being made by those interested in pure food to prevent the use of lye in peeling that most delicious of American fruits, the peach. There is nothing more luscious than a ripe peach, but the average canner, giving no heed to this well-earned reputation, buys up the cheap, green fruit, skins it by immersing it in a boiling lye solution, and labels the product "Extra" and "Standard" quality, etc. Physicians all over the land, as the natural guardians of the consumers of food, are taking a hand in having the vicious practice prohibited under the pure food laws, or at least to force the canner to specify the method on the label, so that the producer can discriminate; for there are some packers, jealous of the state's reputation, who utilize only the knife method of peeling by hand, and who are enabled thereby to use the full flavored, tree-ripened fruit. The fight for high food standards is up-hill work, but is being forced slowly, and the physician is largely responsible for the wonderful advances made so far.—*Lancet-Clinic*, April 23, 1910.

THE PRESENT STATUS OF TUBERCULIN THERAPY.

At the close of an article contributed to the *American Journal of the Medical Sciences* for January, 1910, Voorsanger states he would have us consider carefully what constitutes the present-day status or conception of tuberculin as applied in the specific treatment of pulmonary tuberculosis and during the last year in nearly all forms of the disease. Is it a specific? The author asserts he is compelled to reply in the negative. In the final analysis, we can only regard tuberculin as a valuable adjunct to the hygienic and dietetic therapy of the disease. J. H. Pryor, of Buffalo, is quoted by the author as most tersely stating that a tuberculous patient "must have eighteen square meals of oxygen per minute, accompanied by three square meals of food per day." Trudeau, who has used tuberculin over a longer period of time in more cases and more conservatively than any other man in the United States, shows that 18 per cent more of treated incipient cases are living than of untreated, while 25 per cent more of advanced cases which received tuberculin are living than of those which did not.

Pryor says that many years ago, in spite of general denunciation of tuberculin and long before he knew anything about the statistical evidence, he had formed the opinion that tuberculin, when administered, had within certain limits a favorable influence on the course of the disease, and that the results of sanitarium treatment could be improved and made more permanent in many cases by its application. As years have passed, he asserts he has seen no reason to change this opinion. Thus speaks one of our greatest authorities on this subject. Voorsanger, with small experience compared with his, can only follow his lead. Tuberculin unquestionably is a valuable remedy in its present form, and with the present improved method of administration, and is it not reasonable to hope that as the discarded tuberculin of 1890 was changed through the years into the valuable remedy of today, so may this remedial adjunct of today become a true specific in the future?—*The Therapeutic Gazette*, April 15, 1910.

SCOPOLAMINE-MORPHIN NARCOSIS DURING LABOR.

In its summary of therapeutic advances during the year the *Lancet* has something to say of this subject.

Two important papers on this subject appeared during the past year, one by Sir Haliday Croom and one read at the International Medical Congress by Professor Krönig. The latter, in considering the utility of scopolamine for producing drowsiness during labor, said that in women who were sensitive or of nervous temperament, or neurasthenic, a tedious and painful labor often brought about long-continued and not unimportant states of nervous exhaustion. In those cases it was desirable to reduce the woman's suffering to a minimum by a method which was not injurious to either her or the child. Since Steirbüchel had recommended the scopolamine-morphin treatment for this purpose, Dr. Gaus has been working in Dr. Krönig's clinic with specially introduced systems of testing the state of consciousness at any given time, and has greatly improved the methods for the production of the narcosis in question. On the basis of a clinical material amounting at the present time to 2,000 deliveries it might be stated that the production of drowsiness by scopolamine was free from danger to both mother

and child, and accomplished the object in view by either completely abolishing or else reducing to a minimum the pains of parturition.

Sir Halliday Croom read a paper before the Edinburgh Obstetrical Society on his experience of scopolamine-morphin narcosis during labor. He gave the results of its action on sixty-three cases in private practice and in hospital. He believed the best dose was one-hundredth grain of scopolamine and one-sixth grain of morphin, and he usually administered it toward the end of the first stage of labor, when the pains were coming regularly every few minutes. Occasionally a second dose of scopolamine of one two-hundredth grain was necessary, but he found it advisable not to repeat the morphin. With these doses the pain of the uterine contraction was markedly diminished, and in some cases abolished altogether, and the patients slept soundly in the intervals between the pains and after the completion of labor. Further, the memory of the pains was in most cases strikingly blurred, and many of the patients awoke with no recollection whatever of them. He had found no ill effects from the drugs upon the mother except a little tendency to postpartum hemorrhage, but occasionally the children were born sleepy and required to be revived. In no case was the child's condition serious, and none were still-born. He believed that the treatment was most suited for nervous primiparae, and particularly in private practice, but emphasized the necessity of using the drug in a freshly prepared form.

In the discussion of Krönig's paper Gaus admitted that investigations made by him with Holzbach proved that the secretions, and especially the urine, of the children born after such narcosis contained scopolamine. The children are often born in a condition of oligopnea with some pallor, and lie quite still with limbs which, though relaxed, respond to stimulation. The oligopnea rapidly passes off, and this method of inducing narcosis does not, according to him, increase the number of still-births nor the infantile mortality during the early days or during the first year of life. The method is not one to be used indiscriminately, and the patients should be under the care of, and closely watched by, a competent physician.—The Therapeutic Gazette, April 15, 1910.

THE AMERICAN MEDICAL ASSOCIATION—ITS POLICIES AND ITS WORK.

To those who have given the matter any thought it must seem remarkable that until the establishment of the Council on Pharmacy and Chemistry five years ago there was no disinterested, reliable body to which physicians could apply for information regarding proprietary—or for that matter regarding any—medicinal products. That a physician had no means of obtaining unbiased scientific data on the preparations he was using daily in the treatment of disease seems on its face an anomaly. Such was the case, however, and the result was that all information concerning proprietary medicines had to come from those who were commercially interested in their sale. That information from such a source would be so biased as to be well-nigh worthless for scientific purposes might have been expected; that it was worthless has been demonstrated.

By far the most important work of the council has been that of determining the actual composition—as distinct from the alleged composition—of proprietary medicines. To do this work, careful and painstaking chemical analyses were essential, and for such analyses the council had to depend either on its own members or on chemists connected with commercial laboratories. The arduous duties connected with such work, which of necessity had to be of the most careful and painstaking nature, made it impracticable to expect the chemists on the council to do it themselves; it was also found unsatisfactory to have it done in commercial laboratories. To meet these difficulties the council on Pharmacy and Chemistry in its annual report (1906) to the Board of Trustees of the American Medical Association made the following suggestion: "It is hardly necessary to remind you that there is much detail of a chemical nature connected with this work, and while some of the members of the council have been devoting much time and labor in this direction it is believed that some of this detail work could be done much more satisfactorily if facilities for it were provided by you at the association's building. Therefore, the council begs to suggest that if it is possible to do so, a chemical laboratory be established by the association

with a competent chemist in charge. There is a great amount of work to be done, and it is work that must be continued if the medical profession in the future desires to protect itself from unscrupulous promoters."

The Board of Trustees gave the matter careful consideration, and while it fully realized that the establishment of a well-equipped laboratory would entail no small expense, it decided that the crying need for such an institution amply justified any reasonable expenditure. The board made an appropriation, therefore, and ordered that a portion of the association's building should be fitted up as a chemical laboratory. This was done, and a space twenty feet deep and the entire width of the building was set aside for laboratory purposes and all the apparatus necessary for analytical chemical research was installed.

The board was fortunate in being able to secure, to take charge of the laboratory and to act as secretary to the council, a chemist, who not only ranked high in his profession, but whose familiarity with the conditions and practices of pharmacy and of pharmaceutical manufacturing made him an invaluable asset to the council's work. As the scope of the laboratory's work widened, one chemist was added to the staff, and, later still, another. Both of these men are expert chemists, one holding the highest degree given by a university whose department of chemistry ranks among the best in the country; the other, also a graduate of one of the leading universities of the country, has done extensive analytical work in the Bureau of Chemistry of the Department of Agriculture at Washington. Thus the association has at its command chemical and pharmaceutical talent of the highest grade—an item of importance when it is realized how critically the work of the laboratory is examined by those interests whose shortcomings are exposed. In this connection it is worth while to call attention to the fact that, in all the work which the laboratory has done its results have practically never been successfully challenged—a record of which the medical profession may justly be proud and one, too, that is indicative of the grade of work accomplished.

Good apparatus and expert chemists, however, are by no means all of which the laboratory can boast. A most comprehensive and complete reference library containing the latest and best books on chemistry, phar-

macy and the allied sciences has been collected, and every important pharmaceutical and chemical journal published in any language is also to be found there. The average reader may not at first glance appreciate all that this means. It means that the latest and most reliable data concerning new drugs—proprietary or otherwise—from all parts of the world are now at the disposal of the medical profession of America. The larger manufacturing houses have long realized the value of such data for purely commercial purposes and they have been careful to keep in touch with what was going on outside this country and were ever on the watch for anything new which might develop and which could be used by them. Physicians, however, have been among the last to learn the facts regarding new remedies; the information which manufacturers collected so zealously for themselves was not allowed to trickle out among the medical profession until it had been colored, flavored and sophisticated, often out of all likeness with the original, but always into apparent praise of the preparations marketed under trademarked names.

The laboratory has, then, both the equipment and the personal requisite for the production of the highest type of analytical work. But it has more than this. Since its inception there has been compiled, systematically and thoroughly, the most complete collection of proprietary medicine advertising "literature" to be found anywhere. Such a collection is of inestimable value in tracing, through the devious paths of ever-varying claims for composition and therapeutic virtues, the evolution of many proprietary products now on the market. To see the advertisements put out by different firms a few years ago, and then to compare them with advertisements for the same products today, is in itself a revelation of the steady change—for the better—that has taken place in the commercial standards of pharmaceutical manufacturers.

The work that the laboratory has done in exposing, through the pages of the Journal, the frauds connected with the exploitation of some of the "ethical" proprietaries is well known. The council has felt that the medical profession, having vigorously attacked the "ethical" proprietary evil and, to a large degree at least, set its own house in order, could no longer be accused of inconsistency in exposing the broader and more widely

spread frauds of the "patent medicine" traffic. Within the past year, therefore, the laboratory has extended its work to include the examination of some of the more vicious "patent medicines."

In connection with this work there is being made an ever-increasing collection of information on practically every pharmaceutical or medical humbug that has come before the public in recent years. Inquiries for information about medical frauds and fakes are being received daily. A few of these are answered through the Journal, but the limitations of space make it necessary to answer the great majority by correspondence. As a correlated branch of the laboratory's work, a "testimonial file" has been compiled which contains the names of several thousand physicians who have written testimonials for various proprietary preparations—some for a score or more.

The association laboratory is a unique institution, and it is doubtful if even yet the medical profession fully appreciates its value. Not that its equipment and organization differ essentially from those of any first-class chemical laboratory; but in the scope of its work and in the absolute independence of its action it has no counterpart. Municipal and state laboratories invariably find their work hampered and their usefulness curtailed by the political considerations which the antagonizing of powerful interests develops; even federal examining bodies are not free from such restrictions. In the association laboratory such considerations have had no place and it has published work that others would not have dared to publish. For the first time in the history of medicine—not alone in the United States but anywhere—physicians have an impartial, non-commercial scientific body to determine the honesty of the medicinal preparations put up for their use.

What the chemical laboratory has accomplished cannot easily be separated from what the Council on Pharmacy and Chemistry has done, for the work and aims of these two institutions have been largely along the same lines. Some things, however, can be credited specifically to the laboratory's account:

It has, for instance, shown up the worthlessness of many of the widely advertised "ethical" proprietaries and has torn the veil of mystery from some of the most vicious "patent medicines" on the market.

It has made ridiculous in the eyes of the profession the impossible and absurd formulas with which the advertising pages of medical journals—the Journal among them—used to abound.

It has proved that many combinations of drugs offered to the profession are pharmaceutical impossibilities and scientifically absurd.

It has challenged successfully the attitude previously taken by pharmaceutical manufacturers that no one had a right to publish anything derogatory to their proprietary products.

It has, in short, revolutionized the point of view. While the medical profession used to be looked on as fair game for the fraudulent exploiter of worthless or vicious nostrums, it is now viewed with a fear tempered by wholesome respect for its increased worldly wisdom on the question of proprietaries.—Journal A. M. A., April 23, 1910.

CONFERENCE OF THE COUNCIL ON MEDICAL
EDUCATION AND OF THE COMMITTEE
ON MEDICAL LEGISLATION OF THE
AMERICAN MEDICAL ASSO-
CIATION.

Held in Chicago, Feb. 28-March 2, 1910.

Heretofore the annual conferences on medical education and medical legislation have been held at different times and places. Since the work of the two conferences was so closely related, however, and since many delegates were being asked to attend both, it was determined this year to hold the conferences of these two committees of the American Medical Association at the same time and place. This joint conference met at the Congress hotel at 10 a. m. and was called to order by Dr. Arthur Dean Bevan, Chicago, chairman of the Council on Medical Education.

Address of Chairman.

Dr. Arthur Dean Bevan, Chicago: We are called together for the purpose of improving the medical educational standards. Many of us here know the difference between the modern intelligent medical care and the ignorant charlatan care of the sick. 1. We have seen the woman dying of child-bed fever which might have been prevented by the intelligent aseptic conduct of her confinement. 2. We have seen the child dead from unrecognized and untreated diphtheria, when the death might have been prevented by early laboratory or intelligent clinical diagnosis and the proper use of antitoxins. 3. We have seen the pinched and dusky face of the man dying of peritonitis, which could have been prevented by early diagnosis and proper operative treatment. The public does not as yet realize the importance of public health measures and of measures aimed at securing properly trained medical practitioners.

From a study of the subject of medical education during the last eight years, I desire to present to you briefly some conclusions:

1. Medical education and medical educational standards are not in a satisfactory condition in this country, and, although great improvements

have been made in the last ten years, conditions as a whole are unsatisfactory.

2. It costs more to conduct a modern medical school than the amount which can be obtained from students' fees. The 60 or 70 schools which should survive must receive either state aid or private endowment.

3. The medical school of the future must be developed as the medical department of a university.

4. The study of modern medicine demands: (1) A certain preliminary education; as a minimum this should be eight years in the primary school; (2) four years in the high school; (3) at least one year in special preparation in the pre-medical sciences of chemistry, physics and biology; (4) four years in the medical school, two years in the laboratories of anatomy and physiology, pathology and pharmacology; two years in clinical work in medicine, surgery, obstetrics and the specialties; and finally (5) at least one year of practical work as an interne in a hospital. And the time has about arrived when provision should be made for including this hospital year in the medical course.

5. The state licensing boards of the various states should have the legal power to insist on a proper preliminary education and a proper medical course, and they should have the right to refuse recognition to work done in colleges not offering proper medical instruction and the examination for medical licensure should be of such a practical character and so thorough as to determine the ability of the applicant to practice medicine. This power is necessary in order to protect the people of the state against ignorance and quackery. No public health measure is of greater importance than that aimed at securing properly qualified medical practitioners.

6. In order to secure proper medical standards throughout the country we must have the united support of the state boards, the medical profession, the medical schools, the universities and, what is most important of all, public opinion.

7. In order to obtain this support we must carry on a campaign of education showing what the existing conditions are and what changes are needed in order to secure conditions which will best safeguard public health, secure proper medical attention for the sick and aid in the advancement of medical knowledge.

Secretary's Report: Inspection of Medical Colleges

Dr. N. P. Colwell, Chicago: All the work done by the Council on Medical Education since it was created in 1904 has been focused on the investigation of medical colleges preparatory to issuing a classification of medical schools. In making the investigation, the chief aim has been to point out reasonable standards of medical education and to assist the colleges in any way it could in the fight many of them have been making to keep pace with the advances, which through modern methods of research have been made in knowledge of the causation and treatment of disease.

Following the first tour of inspection, the council was criticised in certain quarters for not publishing outright its classification of medical colleges. That classification was not published, however, because the council desired to give a number of colleges which were contemplating improvements the opportunity to make good. The delay has been more than justified. Many colleges have made extensive improvements, numerous mergers have been brought about and, on the whole, the situation has been greatly improved. The general conditions as revealed by the first inspection, however, were given the widest possible publicity, so that at the present time any plea of ignorance of

the demands of modern medicine is unworthy of consideration.

Including pseudo-medical colleges, there is an amazing variety of institutions professing to teach medicine in whole or in part which are annually turning out thousands of graduates who seek the privilege of practicing medicine. While some of these graduates may be thoroughly competent, there are doubtless many who are illiterate, untrained and decidedly incompetent. While they may differ greatly in their theories of disease and their methods of treatment, those who by whatever means secure the right to practice will be alike in this respect: They will all be required to differentiate between the normal and the abnormal; they must determine the nature of diseases, injuries and deformities and in many of their cases what they do or fail to do will mean the life or the death of the patient.

The point to be borne in mind is that an osteopath is required to make a diagnosis just as a medical practitioner is, and, therefore, needs a similar training in the fundamental medical branches. Lower educational standards for osteopaths, therefore, are a serious menace to the public and an unfair discrimination against medical practitioners. Regarding osteopathic colleges also it should be stated that owing (a) to their lower preliminary requirements, (b) to their shorter course for the osteopathic degree, (c) the few instructors in their faculties who have had a scientific medical training, and, more important still, (d) to the serious if not absolute lack of laboratory equipment and clinical facilities not one of the osteopathic colleges in the United States can be compared even with those medical colleges which have been rated far below 50 per cent by the Council on Medical Education.

The only legal barrier which can protect the public from ignorant, untrained and incompetent practitioners is the state medical licensing board. It is of extreme importance, therefore, that in each state there should be a single licensing board, that its members should be selected because of their special fitness for the work involved and that this board should be given full authority in the premises. Instead of that we now have in our 49 states and territories 82 different boards of medical examiners including the sectarian boards. In some states the responsibility for defending the public against ignorance, incompetence and fraud is divided among as many as four separate boards. The time has come, however, when the medical profession and the people of each state should see to it that a single board of competent medical examiners shall control the licensing of all practitioners of medicine and that his board be given full authority. This one barrier between the sick and afflicted and the crowds of ill-trained and incompetent practitioners must be made effective.

Report of the Special Committee on Practical Tests at State License Examinations.

Dr. W. S. Fullerton, St. Paul: After about a year's trial in their respective states your committee finds the practical examination on certain subjects in the curriculum for state licensure eminently satisfactory. The state boards which have adopted it began in a tentative way, but experience leads the committee to believe that it is capable of considerable extension and development and worthy of universal adoption by state examining boards. The committee believes that the practical examination, more than any one thing, compels the candidate for license to come before the board with real knowledge in the subjects to which it is applied, obtained by well-directed work, and that

it effectually does away with the "quiz-compend applicant" superficially and specially crammed to meet the ordinary written examination.

Your committee recommends that state examining boards shall require practical examination in the following subjects: Diagnosis, pathology, histology, bacteriology, urinalysis, obstetrics and anatomy. While this may sound formidable the committee is convinced that it is feasible. For example, on the basis of 100 applicants a physical diagnosis examination can be completed in five hours by providing ten subjects, taking the class in relays of ten, each to examine one case and to be allowed half an hour for such examination. The practical in anatomy can be carried on concomitantly, each relay passing from one to the other. The committee recommends that the present written examination in anatomy (which is necessarily book anatomy) be dispensed with, and a practical examination consisting of a description of prepared specimens be substituted, believing that one such specimen correctly described is of more value as a test of anatomic knowledge than ten answers which may involve only the question of memorizing from a quiz compend. The committee also recommends that the practical examination in histology, pathology and bacteriology shall consist in the identification of a sufficient number of microscopic slides and gross specimens. The committee further recommends that there shall be a practical chemical and microscopic examination of one or more specimens of urine.

Practical Examinations in Ohio.

Dr. George H. Matson, Columbus, O.: In a supplementary statement Dr. Matson, a member of the committee, called attention to the results of practical examinations which were inaugurated by the Ohio board in June, 1908. Since that time applicants' grades in the laboratory branches show a marked improvement over the grades given before such tests were adopted. The examination of blood, sputum, feces and stomach contents is also suggested. Examination in clinical medicine may be inaugurated by presenting cases of readily recognized heart and lung lesions, enlarged liver and spleen in satisfactory subjects, syphiloderms and easily recognized skin diseases. In anatomy, the applicant may be asked to indicate and name points of interest on a given bone, to outline the various organs in the living subjects, and to locate points of interest that may be required of him.

In obstetrics, the manikin may be used and it is suggested that the applicant be required to demonstrate and diagnose positions and to demonstrate the treatment of abnormal position. He should also be required to demonstrate the use of the pelvimeter. Practical work in refraction may also be added. Six examiners could examine seventy-two applicants in six hours.

TUESDAY MORNING SESSION.

Report of the Committee on Organization of a State Board of Medical Examination and License.

Dr. W. H. Sawyer, Michigan, chairman, read the report of this committee stating that there should be a board of medical examiners separate from the state board of health. Several states have tried the combined board of health and medical examination, but have, after experience, separated them, and those states in which the two boards are already combined are endeavoring to have the division made.

The examining board should be single.

The examining board should be non-sectarian. However, under existing circumstances it does not

seem practicable or possible of accomplishment. In nineteen states the law provides for a mixed or sectarian board. Of seventeen states in which the law is silent as to sect, fourteen reported through the secretary of the board, seven advocating a mixed board, three a non-sectarian board, and from four there was no expression.

The examining board should be appointed by the governor on nomination of the state society. Any other attempted method at this time would more than neutralize the good effect of the medical board on the profession and people at large.

The secretary should be a member of the board. When possible he should be a member of the board, but not necessarily so.

The examining board should be entirely distinct from all educational institutions. This applies to every state in the union except New York, where the University of the state of New York is a corporate institution, executive in its character and non-teaching.

In connection with the report of Dr. Sawyer, Dr. W. Jarvis Barlow, California, presented some statistics from that state which gave a general idea of the fitness of such schools to educate students in medicine.

Report of the Committee on Qualifications of Applicants.

Dr. S. D. Van Meter, Denver, chairman of the committee, presented this report:

It is unquestionably desirable that all applicants for license to practice medicine should be required to furnish proof of having received preliminary and collegiate education equal to that standard recommended by the Council on Medical Education. The members of the committee feel that all boards cannot afford to adopt these requirements for all applicants. Nothing can be said against its adoption for those making application for license on credentials, but to deny those wishing to make application by examination the right so to do raises a very serious question. The committee believes that only the fundamental branches should be included in the list of subjects for examination and that all questions on materia medica and therapeutics should be excluded. It is not advisable for the state to encourage sectarianism in medicine and it has no more right to recognize a school of medicine than one of theology. Examinations, in the opinion of the committee, should be oral, clinical and written. They should be practical and designed to furnish the examining board with adequate information on which to determine the educational and moral qualifications of those examined. The committee believes that examining boards should have the authority to determine the standing of colleges. They should arrive at their conclusions by an unbiased review of all obtainable data, but owing to the cost and physical impossibility of making personal investigations of colleges at a distance, boards must of necessity at present rely chiefly on the reports of the Council on Medical Education and the Carnegie foundation for the Advancement of Teaching.

Report of the Committee on the Definition of the Practice of Medicine.

Dr. L. M. Halsey, New Jersey, presented the following definition: A person practices medicine and surgery within the meaning of this act who holds himself or herself out as being able to diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity, physical or abnormal mental conditions, and who shall either offer or undertake by any means or methods to

diagnose, treat, operate or prescribe for any human disease, pain, injury, deformity, abnormal, mental or physical conditions.

Provision for Educational Standards in a Model Medical Practice Act.

Dr. N. P. Colwell, secretary of the Council on Medical Education, Chicago: No practice act can be considered a model which does not provide for a single board of medical examiners, or a single authority for the enforcement of its requirements. Nor can it well be considered a model unless it provides that the members of this board are to be selected because of their special qualifications for the duties involved, rather than for political or other reasons. Unless these two points are safeguarded any provision for educational standards will be of limited value. With our form of government, a single board of capable medical examiners is the best and only legal barrier which can be placed between a suffering humanity and the hordes of would-be practitioners being turned out annually from the one hundred and sixty or more medical institutions in this country, many of which adhere to no definite standards, and have little or no facilities for the satisfactory training of medical practitioners. Taking it for granted that a single board of able medical examiners is provided for by the practice act, then the simplest wording of the clause, providing for educational standards is the best. A model practice act should not attempt to define educational standards nor what should constitute a medical college in good standing because standards are rapidly changing, but should give the board the authority to fix standards.

The requirement of graduation from a reputable medical college, as shall be determined by the board, affords a double assurance that all applicants granted licenses are well qualified to practice medicine. First, a medical college which the board knows is reputable has certified to the applicant's fitness to practice medicine by having granted him its diploma; and, second, the state board has subjected the applicant to its examination, which must have been satisfactorily passed before the license is granted.

Report of the Committee on Reciprocity and Registration.

Dr. Charles H. Cook, Massachusetts, read the report of this committee:

All medical legislation is embraced under what is called the police power and has to do with the protection and benefit of the public. Legislation relating to reciprocity should have for its object the public welfare, else such legislation cannot be justified. To justify a law establishing reciprocity between states it must be made clear that it would result in better protection to the inhabitants of the respective states.

For what purpose are the various state boards of registration established? To protect the inhabitants of the respective states from unqualified physicians.

Can the duty and the responsibility of thus protecting the inhabitants of any state be delegated to the examining boards of other states? There can be but one answer to this, and that is that each state board is the only board to pass on the merits of applicants for registration in its state and such powers cannot constitutionally be delegated to any one else.

The committee could not recommend any law providing for general reciprocity. The suggestion

was made instead that each state board be given authority to pass on the merits of each physician applying from another state, and whenever his credentials, affidavits and general qualifications would warrant such action, that he be registered without full examination.

What provisions for the registration of licentiates should a model law contain, and should any provision be made for county registration? If so, before what officers? As the purpose of registration is the establishment of a legal record accessible to the people whom it is intended to protect, the records should be sufficiently convenient to permit of prompt reference. The entry of registration should not only be with the state board, but with and before the local registrar of legal records, whether it be county, town or district or other subdivision of the state existing. Also a record of registered names of the whole state should be accessible in each subdivision of records to permit of knowledge of the standing of any licentiate who may come from a neighboring or a distant county in the state.

Report of the Committee on Revocation of License and Penalties.

In the absence of the chairman of this committee, Dr. E. L. Stevens, Iowa, the report was presented by Dr. B. R. McClellan, Ohio:

1. Should the state licensing board have power to revoke a license; if so, on what ground? Yes, subject to an appeal by the defendant to the district court.

2. Should such revocation by the state board be subject to the review of the courts; if so, should this include only a review of the proceedings of the board, or should the review include the questions at issue and the evidence introduced? Yes, on appeal, in which case the courts should review the proceedings of the board and consider the merits and all the questions at issue in the case, with the thought of justice to all concerned and the further thought of protection of the public.

3. Should a model medical practice act impose a penalty for obtaining money from patients through false representation, as well as for practicing medicine without a license? Yes, the medical practice act should impose a penalty for obtaining money from patients through false representation. Such penalties, if possible, should require restitution as well as fines and imprisonment. Such penalty should be as severe, more severe than frauds, in banking or insurance.

4. What should be the penalty for practicing medicine without a license? Should it be fine, imprisonment, or both? Both fine and imprisonment.

5. What should be the penalty for falsely representing one's self to be a legally qualified physician? If this question be interpreted as implying that the one thus falsely representing himself also attempts to practice under such misrepresentation, he should be subjected as suggested in the answer to question three.

6. Should revocation of license be temporary or permanent? Either permanent or temporary, depending on the evidence and public welfare.

7. Should unprofessional conduct or criminal abortion be considered a justifiable cause for the revocation of a license? Yes.

8. What other causes should justify revocation of license? Perjury while on the stand as expert witness.

9. What penalty should be imposed on limited practitioners who exceed their functions? The same penalties as those for practicing without any kind of a license.

TUESDAY AFTERNOON SESSION.

Some of the Constitutional Aspects of Medical Licensure.

Prof. Ernest Freund, Professor of Jurisprudence and Public Law, University of Chicago: The serious difficulty of the licensing system lies in the details of its working out and relates both to its scope and its requirements. The problem has generally been treated as one of legislative policy and statutory construction. Our courts have found it possible to construe the term "practice of medicine" in such a way as to exclude osteopathy, optometry, massage and Christian science treatment. In a great many cases the legislature has inserted liberal exceptions into the statute, especially so with regard to mental treatment. In other cases, and particularly with regard to osteopathy, it has prescribed special tests of qualifications. There is a double objection to a licensing law too sweeping in its terms, and not sufficiently regardful of simpler methods of treatment. One objection is that it will give color to the charge or suspicion of monopolistic exclusiveness; the other is that it will lead to exemption by judicial interpretation, or if the terms of the statute make that possible, to a breaking down of the law through non-enforcement, and the consequent toleration of a class of outlawed practitioners who might with advantage to the community be given a status of legal recognition. To discover the sound principles of medical practice legislation, a study of the history of legislation is as important as a study of judicial decisions. Under prevailing conditions in this country the preponderance of argument is in favor of the maintenance of the license system, and sound principle requires a careful definition of licensed practice, and its protection as a right of property. The whole matter of qualification, differentiation and exemption, on the other hand, is one in which there must be much of positive or conventional regulation, and in which conclusions must be reached mainly on the basis of experience, expediency and the compromise between conflicting views.

Uniform State Laws.

Prof. Roscoe Pound, University of Chicago, discussed the value of uniform state laws regulating the practice of medicine.

Importance to the Public of the Proper Enforcement of Medical License Laws.

Hon. Harry Olson, Chief Justice Municipal Court, Chicago: The American Medical Association is rendering the public most important service by its efforts to secure a uniform and high standard of medical education and licensure in all the states. The intelligent and thoughtful layman is encouraged by the progress made by the association in this regard since 1904. The wonderful progress of medicine in the last thirty years has increased the need of a thorough education of those who contemplate its practice. The machinery to enforce the medical license laws should not be in the board of health. That body has its hands full with the questions of public sanitation, quarantine, and occasionally, it is said, politics. There should be a separate body composed in the majority of medical men, but it would do no harm to have a lawyer on it which should control not only the licensing of physicians, but the requirements of the accepted medical colleges and the requirements of preliminary education for entrance on the study of medicine as well. This body should have power on complaint and after giving due notice to hear evidence as a court and to determine whether a license once granted should be revoked for conduct involving immorality in the practice

of medicine, and such offenses as dishonesty, conviction of crime, addiction to drug habits, etc. The power the supreme court of this state has to disbar a lawyer on a proper showing made to him by the state's attorney, the bar association, or an individual, after notice and after a hearing of his dishonesty, is a tremendous factor in purifying the legal profession and in keeping its dishonest members within bounds. The licensed lawyers who were convicted during the ten years that I acted as a prosecutor in the criminal courts of Cook county were promptly disbarred by the supreme court. The physicians who served in the penitentiary promptly on their discharge resumed the practice of medicine, even though the crimes they committed involved falsification of vital statistics, and in one case, though the indictment was based on the charge of conspiracy to obtain money by false pretenses, the court and jury were of the belief that a murder had been committed. Without examining the law and decisions of the courts of this state it would seem that the local medical profession had been derelict in the matter of its failure to present evidence to the State Board of Health against those members of their profession licensed in the state who ought to have forfeited their right to practice by unprofessional or dishonorable conduct.

The law of this state permitting the revocation of physicians' license for dishonorable conduct only applies to those physicians whose licenses were issued since 1899. As the law now stands, those licenses issued prior to 1899 may not be revoked. This defect in the law should be amended at the next session of the legislature, so as to apply to all physicians who are permitted to practice their profession in this state, no matter when their licenses were procured. The statute should be amended to state plainly that a license might be revoked for misconduct as a physician, which misconduct should be specifically enumerated in the statute. Conviction of a felony should be added as one of the causes. The responsibility for the proper enforcement of medical license laws falls first on the medical profession itself. It must furnish the initiative. The machinery is at hand now for all licensed since 1899. An amendment to the law will reach all. The state's attorney and the courts are at the disposal of physicians and the people are with them.

The Attitude of the Medical Profession Regarding Medical Practice Laws.

Dr. Henry B. Favill, Chicago: The majority by far of the members of the medical profession have no concern or no conscious interest in medical practice acts. Elevation of the rank and file of physicians in point of fundamental education and practical efficiency clearly rests with the medical profession. Yet, as a practical feature, it is found to go only *pari passu* with public demands. The improvement in standards and requirements in medical schools in recent years have been particularly in those schools in which the nature of things would have improved under growing conceptions and higher ideals. All the leading colleges as a mere evolution of medical thought would have reached their present status without state requirements. To declare any candidate eligible who has a diploma from a recognized medical school; to recognize medical schools on the basis of fictitious presentation and fraudulent methods, and then to complete the test by an examination which any man with a good memory and no medical training can easily pass, is not only futile, but in the highest degree iniquitous. The more clearly the elements of qualification and competency can be set forth, the greater will be the influence among the minds of the public.

The early history of reform movements may be a necessity marked by arbitrary and restrictive measures. As a feature of permanent and well-constructed society, however, that custom which rests on widespread intelligence is the only custom which can be expected to endure. The merits of the suggestions which I make are three. (1) The highest degree of individual freedom; (2) the highest standard of classification as a guide to public judgment; (3) limitation of the stamp of approval or employment by the state to individuals whose qualifications have been actually determined. I believe that there is but one ground on which to justify the interest and agitation in the matter on the part of the profession. That ground is protection of public interests.

WEDNESDAY MORNING SESSION.

Chairman's Address: Work of the Committee on Medical Legislation.

On the third day of the joint conference, Dr. Charles A. L. Reed, Cincinnati, chairman of the Committee on National Legislation, presided.

Secretary's Report.

Dr. Frederick R. Green, Chicago: The careful attention of members of the National Legislative Council should be given to the advisability of selecting, so far as possible, men for appointment on the National Auxiliary Legislative Committee who are interested in legislative matters and active in medical society and political work, and especially the selection of those who will give prompt attention to communications sent from the committee, the bureau or the members of the National Legislative Council. It is also advisable to consider carefully each member's record or efficiency in making reappointments or filling vacancies in order that the best and most experienced men may be retained and those who show inefficiency or lack of interest may be eliminated.

The secretary then discussed vital statistics, pure food and drugs, state medical practice acts, expert testimony, sectarian legislation, reorganization of the legislative work of the association, and closed by saying that the value of the Bureau of the Council, the various state associations, and the American Medical Association itself, will be in direct proportion to the assistance and cooperation rendered by the representatives of the different states.

WEDNESDAY AFTERNOON SESSION.

Report of Reference Committee on National Legislation.

Dr. G. B. Young, United States Public Health and Marine Hospital Service, presented the report of this committee endorsing the following bills now before Congress: S. 1017, H. R. 6184, Sixty-first Congress, first session. "A bill to Reorganize and Increase the Efficiency of the Hospital Corps of the United States Navy and to Regulate its Pay." S. 1015, H. R. 4305, Sixty-first Congress, first session. "Authorizing the Appointment of Dental Surgeons in the Navy." S. 4745, H. R. 16892, Sixty-first Congress, second session. "To Equalize the Pay and Allowance of Assistant Surgeons and Acting Assistant Surgeons in the United States Navy." Bill submitted in draft and not numbered: "To Increase the Efficiency of the Medical Department of the United States Navy."

Committee on Federal and State Regulation of Public Health.

This committee reported that the bill now before Congress, asking for a department of health, will probably not be passed at the present time. The committee suggests that a bill be passed that will

give recognition to the health interests of the country in the title of a department, and that within that department there be organized an efficient bureau of health to consist of all present public national health agencies.

On motion, the report was adopted.

Report of Committee on Optometry.

Dr. George W. Gay, Boston: The committee believes most emphatically with the medical profession that as a rule a medical training is indispensable for a proper treatment of the eye on account of the close relationship between the eye and other parts of the body, and between eye symptoms, like headache and poor sight, and general constitutional conditions. Without medical training and with nothing but his crude untrained observation how will the optometrist be able to tell the presence of deep-seated intraocular disease? The optometrists have few, if any, proper schools and those already in existence are not officially recognized by the optical societies. The great state of New York has but one school of optometry and that is located in Rochester, the city of New York having none. Furthermore, an overwhelming majority of the optometry or optical schools consist entirely of correspondence courses of a few weeks or months, giving a degree in which the title "doctor" is apt to figure prominently. The price of these courses varies from five to twenty-five dollars and usually includes a handsomely engraved diploma. Optometry is a trade, not a profession. Like that of the optician, it is learned as are many trades, the watchmakers, for example, by working in a shop as an apprentice for a time, then perhaps as a journeyman until able to set up business for himself. No special preliminary education is required, and he earns his living while learning the business. This is a very different experience from that of learning a profession, as that of an oculist, for instance, which requires several years of preparatory study before entering the medical school term of four years, then the hospital course and the post-graduate courses, to say nothing of the considerable expense involved in this career of the practitioner.

Medical Expert Testimony.

Dr. L. M. Halsey, New Jersey, presented the report of this committee:

As the result of a recent canvass made by the Committee on Medical Legislation of the American Medical Association it was found that of thirty-five states heard from only two, Michigan and Rhode Island, had statutes regulating the admission of medical expert testimony to the courts. In summarizing its work the committee offered the following suggestions:

1. Give the courts the common-law power to charge the jury on the expert evidence.
2. Also give them the authority to call experts of their own motion under certain conditions, said experts to be paid by the county in which the case falls.
3. Resort more frequently to medical commissions and to the custom which obtains in ordinary consultations.
4. Let the courts allow to serve as experts only those who are properly qualified and let them be treated as gentlemen in court, abolishing the custom, too prevalent in some places, of badgering and insult during cross-examination.

Could these suggestions be adopted, there would be little cause for complaint as to the character of medical expert evidence in our courts. Expert medical testimony would occupy a higher standard of excellence than it has ever done before, one commensurate with its importance and its universal demand.

Report of the Carroll Fund Committee.

Major M. W. Ireland, U. S. Army, chairman of the Carroll Fund Committee, gave a detailed statement of the work of this committee, giving the names of all subscribers and the amounts subscribed. The committee urged that action be taken to secure the property of Mrs. Carroll from future indebtedness, and on motion the committee was given power to act in this regard.

Report of Committee on Conclusions and Plans of Action.

Secretary Green presented the following report of this committee:

1. Resolved, That it be the sense of this conference that opticians be licensed as such by the state medical boards, and that Dr. Gay's pamphlet be endorsed and ordered distributed.

On motion, this resolution was adopted:

2. Resolved, That the conference recommends the passage of bills S. 1017, H. R. 6184, Sixty-first Congress, first session; S. 105, H. R. 4305, Sixty-first Congress, first session; S. 4745, H. R. 16892, Sixty-first Congress, second session; also the bill to increase the Medical Department of the United States Navy.

On motion, the resolution was adopted.

3. Resolved, That the conference recommends the passage of the bill for the relief of the estate of late Assistant Surgeon, W. H. Miller, U. S. P. H. and M. H. S., and recommends the passage of legislation in the interests of the personnel of the U. S. P. H. and M. H. S.

On motion, this resolution was adopted.

4. Resolved, That the conference recommends that state food laws be so amended as to provide that advertisements of food and drug products correspond with the labels; and that the drug section of the model pure food law conform as closely as possible to the national Food and Drug Act.

On motion, the resolution was adopted.

5. Resolved, That the conference heartily endorses the position taken by the President in his message to Congress in regard to national health legislation, and urges on Congress the passage of legislation looking toward such ends.

On motion, the resolution was adopted.

6. Resolved, That the conference endorses the control by state medical examining boards the standards of medical education, and also endorses the standards of education, both preliminary and collegiate, recommended by the Council on Medical Education, but it is the sense of the conference that adherence to these standards should not be allowed to result in the destruction of a single sectarian board.

On motion, the resolution was adopted.

On motion of Dr. Halsey, the report was then adopted as a whole.

The conference then adjourned sine die.

CIVIL SERVICE EXAMINATION FOR MEDICAL INTERNE.

Government Hospital for the Insane.

The United States Civil Service Commission announces an examination on June 15, 1910, to secure eligibles from which to make certification to fill at least two vacancies in the position of medical interne (male), government hospital for the insane, Washington, D. C., at \$600 per annum each, with main-

tenance, and vacancies requiring similar qualifications as they may occur in that hospital, unless it shall be decided in the interests of the service to fill either or both of the vacancies by reinstatement, transfer or promotion.

CIVIL SERVICE EXAMINATION FOR PHYSICIAN (MALE).

The United States Civil Service Commission announces an examination on June 1, 1910, to secure eligibles from which to make certification to fill a vacancy in the position of physician, \$1,000 per annum and quarters, in the Indian Service, Pine Ridge agency, South Dakota, unless it shall be decided in the interests of the service to fill the vacancy by reinstatement, transfer or promotion.

LIST OF DELEGATES TO THE THIRTY-FOURTH ANNUAL SESSION OF THE ARKANSAS MEDICAL SOCIETY.

Arkansas—W. H. Mophew, Stuttgart.
 Ashley—J. P. Baker, Blissville.
 Baxter—J. J. Morrow, Cotter.
 Benton—C. C. Rice, Gentry.
 Boone—A. M. Hathcock, Harrison.
 Bradley—C. H. Martin, Warren.
 Calhoun—D. F. Wilson, Hampton.
 Carroll—John F. Johns, Eureka Springs.
 Chicot—S. O. Scott, Eudora.
 Clay—A. B. McKenney, Corning.
 Clark—H. Hardy, Stroud.
 Cleveland—W. L. Hatzell, Draughton.
 Columbia—C. D. Stevens, Magnolia.
 Conway—G. W. Ringold, Morrilton.
 Craighead—J. C. Howell, Dee.
 Crawford—M. S. Dibrell, Van Buren.
 Desha—J. A. White, Dumas.
 Drew—A. S. Collins, Monticello.
 Faulkner—G. L. Henderson, Greenbrier.
 Grant—L. Wallace, Sheridan.
 Greene—Thad Cothren, Walcott.
 Hempstead—J. S. Waddle, Shelton.
 Hot Spring—Garland—L. H. Barry, E. C. Hay, Hot Springs.
 Hot Spring—W. A. Carroll, Saginaw.
 Howard—Pike—W. H. Toland, Mineral Springs.
 Independence—O. J. T. Johnson, Floral.
 Jackson—R. E. Willis, Newport.
 Jefferson—J. W. Scales, Pine Bluff.
 Johnson—G. D. Huddleston, Lamar.
 Lafayette—L. F. Magee, Frostville.
 Lawrence—J. C. Land, Walnut Ridge.
 Lee—A. A. McClendon, Marianna.
 Little River—W. E. Baughan, Richmond.
 Lincoln—F. L. Duckworth, Gould.
 Logan—S. P. McConnell, Booneville.
 Lonoke—H. Thibault, Scotts.
 Montgomery—J. S. Kennedy, Mt. Ida.
 Miller—L. J. Kosminski, Texarkana.
 Mississippi—Thomas G. Brewer, Osceola.
 Monroe—T. J. Stout, Brinkley.
 Nevada—W. W. Rice, Prescott.
 Ouachita—W. L. Newton, Camden.
 Phillips—M. Fink, Helena.
 Polk—W. P. Parks, Mena.
 Pope—W. A. Montgomery, Atkins.

Prairie—Joseph Parker, DeVall's Bluff.
 Pulaski—E. P. Bledsoe, Anderson Watkins, Little Rock.
 Randolph—J. R. Loftus, Maynard.
 Saline—J. M. Phillips, Benton.
 Sebastian—St. Cloud Cooper, J. G. Eberly, Fort Smith.
 Searcy—S. G. Daniel, Marshall.
 Sevier—C. E. Kitchens, De Queen.
 Union—L. L. Purifoy, El Dorado.
 Washington—F. W. Blackburn, Cane Hill.
 White-Cleburn—L. E. Moore, Searcy.
 Woodruff—E. F. Brewer, Augusta.
 Yell—C. B. Lindsey, Plainview.

County Societies

INDEPENDENCE COUNTY.—The Independence County Medical Society met in Batesville April 3, 1910, with the following members present: Drs. J. H. Kennerly, R. C. Dorr, J. W. Case, C. G. Hinkle and Frank A. Gray of Batesville; Dr. O. J. T. Johnson of Floral, Drs. T. N. Rodman and O. L. Bone of Cushman, Dr. O. T. Ward of Wolf Bayou. The following officers were elected for the ensuing year: O. J. T. Johnson, president; T. N. Rodman, vice president; Frank A. Gray, secretary and treasurer; O. J. T. Johnson was elected delegate to the State Medical Society and R. C. Dorr alternate. The society entered into a general discussion of pneumonia, peritonitis and empyema and was enjoyed by all present. Dr. O. L. Bone of Cushman and Dr. L. T. Evans of Barrenfork were elected as new members of the society. The society adjourned to meet the first Monday in July and to have a supper at one of the hotels.

FRANK A. GRAY, *Secretary.*

DESHA COUNTY.—The Desha County Medical Society met at McGehee April 27, with the following members present: Drs. T. H. Bowles, Dumas; A. Isom, Dumas; J. A. White, Dumas; Vernon McCammon, Arkansas City; Robt. R. King, Walnut Lake; C. R. Chesnut, Pendleton; J. M. Stuart, McGehee.

The following officers were elected for the ensuing year: A. Isom, president; J. M. Stuart, secretary; J. A. White, delegate to State Medical Society to be held in Little Rock May, 1910, with C. R. Chesnut as alternate.

It was moved and carried that the secretary use his discretion in accepting other members to the society who are eligible to become members of this society.

It was moved and carried that the society hold quarterly meetings, the next meeting to be held in Dumas, Ark., on the evening of the first Wednesday in August.

It is the unanimous opinion of the members of this society that the State Medical Society do not accept non-graduates to county or state medical society.

Next meeting of this society to be held in Dumas the first Wednesday in August, 1910.

C. R. CHESNUT, *Secretary.*

Book Reviews.

Tuberculosis.—A treatise by American authors, on its etiology, pathology, frequency, semeiology, diagnosis, prognosis, prevention and treatment. Edited by Arnold C. Klebs. The price in cloth is \$6.00. D. Appleton & Co., publishers, New York.

Every chapter in the work deals with a distinct phase of the subject, written by men specially familiar with that particular line of disease. It is not like so many works of the kind that are compiled merely for a book of reference, but it is uniformly arranged to fill the requirements of the busy practitioner, and should be in the library of every physician.

The Principles and Practice of Medicine.—By William Osler, M. D., Regius Professor of Medicine in Oxford University, England, formerly Professor of Medicine in Johns Hopkins University, Baltimore; in the University of Pennsylvania, Philadelphia, and in McGill University, Montreal. Seventh edition; thoroughly revised. Price in cloth, \$5.50. D. Appleton & Co., publishers, New York.

This popular work has been extensively revised, as there has been many additions to our knowledge of disease and its treatment, particularly in connection with the acute infections, since the previous edition.

As the author states in his preface he has incorporated all the more important advances—the long-expected discoveries in syphilis, the work of the New York Pneumonia Commission, the stamping out of Malta fever by the British, the work of Gorgas in Panama, Strong in the Philippines, and Flexner's hopeful work in cerebro-spinal fever, and the contributions on "carriers" in the acute infections.

The studies on epidemic anterior poliomyelitis, milk sickness and the serum disease.

The section on parasites has received many additions, and in the chapters on diseases of special organs much new matter has been incorporated. The section on diseases of the nervous system has received its share in the revision.

An Epitome of Diseases of Women—By Charles Gardner Child, Jr., M. D. (Yale), Clinical Professor of Gynecology, New York Polyclinic Medical School and Hospital. 12mo, 210 pages, with 101 engravings. Cloth, \$1.00, net. Lea & Febiger, publishers, Philadelphia and New York, 1909. (Lea's Series of Medical Epitomes. Edited by Victor C. Pedersen, M. D., New York.)

A manual for students and practitioners with no attempt to cover the field of larger text-books, but to present the subject in as concise a manner as possible with brevity.

A Manual of Otology—By Gorham Bacon, A. B., M. D., Professor of Otology in the College of Physicians and Surgeons, Columbia University, New York; Aural Surgeon, New York Eye and Ear Infirmary; consulting otologist, Roosevelt Hospital, New York. Fifth edition; 490 pages; 147 illustrations and twelve plates. Lea & Febiger, publishers, Philadelphia and New York, 1909.

The call for a fifth edition of this work is quite a compliment to its author and publishers. It must be fulfilling its purpose as a text-book for students and serving a place among quite a few general practitioners.

The Medical Complications, Accidents and Sequels of Typhoid Fever and the Other Exanthemata—By H. A. Hare, M. D., B. Sc., Professor of Therapeutics in the Jefferson Medical College and Physician to the Jefferson College Hospital, Philadelphia, and E. J. G. Beardsley, M. D., L. R. C. P., Philadelphia. With a special chapter on the Mental Disturbances Following Typhoid Fever, by F. X. Dercum, M. D., Professor of Nervous Diseases in the Jefferson Medical College. Second edition, thoroughly revised and much enlarged. Octavo, 398 pages, with 26 engravings and two plates. Cloth, \$3.25, net. Lea & Febiger, Philadelphia and New York, 1909.

This, the second edition of Hare on Typhoid Fever, has been rewritten and a valuable new feature is added in that of the other exanthemata. Every practitioner is concerned with typhoid, and should be familiar with all its symptoms, complications and sequels. It is a book that should be in every practitioner's library.

Systemic (including Special) Pathology—By J. George Adami, M. D., and Albert G. Nicholls, M. A., M. D., F. R. S., Assistant Professor of Pathology in McGill University. In one octavo volume of 1,082 pages, with 310 engravings and 15 colored plates. Cloth, \$6.00, net. Lea & Febiger, Philadelphia and New York, 1909.

The volume on General Pathology by Prof. Adami was such a success that all have been looking forward to his second volume, Systemic Pathology. The same easy and charming way of presenting his subject prevails as in his first volume.

The arrangement of its contents, its charming literary style, coupled with the simplicity of his reasoning, leaves the reader with a

knowledge that is hard to forget. Prof. Adami's work takes first rank among writers of the Western continent.

Publishers' Notes

AN IMPORTANT UTERO-OVARIAN SEDATIVE, ANODYNE AND TONIC.

While it is unquestionably true that many cases of pelvic diseases in women are amenable only to surgical treatment, it is quite evident that there are not a few in which, for some reason or other, operative measures are out of the question. Among these may be included the many cases of dysmenorrhea and ovarian hyperesthesia, for the relief of which recourse is too frequently had by the patients to alcohol, the narcotics, or some of the much-vaunted nostrums on the market.

It has been shown to be a mistake to suppose that substantial and lasting benefit cannot be obtained in these ailments by the internal administration of therapeutic agents, a number of which have been thoroughly tried, with results often satisfactory, sometimes brilliant. An agent of undoubted value in such cases is Liquor Sedans, a preparation introduced to the medical profession many years ago by Messrs. Parke, Davis & Co., and esteemed and prescribed by physicians to an extent, it is believed, not equaled by any similar compound.

Liquor Sedans is composed of three of the most important sedatives, anodynes and tonics to the female reproductive tract—namely, black haw, hydrastis and Jamaica dogwood—so combined with aromatics as to constitute a very acceptable preparation, being in this respect unlike some other agents of a similar nature which are ordinarily taken with great reluctance. It is of marked usefulness in the treatment of functional dysmenorrhea, menorrhagia, ovarian irritability, menstrual irregularity, etc. Parke, Davis & Co. also manufacture Liquor Sedans Rx 2 (without sugar), which is precisely like the older formula, but for the omission noted, and which is available for use in cases in which sugar is contraindicated; also Liquor Sedans with Cascara, which is of the same composition as Liquor Sedans except that each fluid ounce contains 40 minims of the fluid extract of cascara sagrada, giving to the formula an important tonic-laxative value.

INTRAVENOUS INJECTIONS OF NUCLEIN IN TUBERCULOSIS.

Edgar P. Ward (Medical Record, March 6, 1910) presents a new theory as to the action of nuclein in tuberculosis, in which disease he administers the remedy in a novel way. In every case of tuberculosis which he has examined within the past two years he has found a decrease in the specific gravity of the blood with a corresponding diminution of the percentage of hemoglobin. There is also a lessened number of red blood corpuscles, with an increase of the deformed cells, or poikilocytes, as they are called. These changes are proportionate to the severity of the disease. As a consequence of the low percentage of hemoglobin there is a marked deficiency in the oxygen-carrying power of the blood.

This blood condition Dr. Ward has found to yield rapidly under the influence of intravenous infusions of a solution of sodium triticonucleinate, standardized to one milligram of organic phosphorus to each cubic centimeter. A physiologic salt solution is used as a vehicle.

Dr. Ward believes that the value of nuclein depends not so much upon its property of producing leukocytosis as upon its power of restoring the percentage of hemoglobin and of the number of red cells, while at the same time reducing the number of poikilocytes and increasing the specific gravity. In other words, the nuclein acts as a "blood builder." That all these changes take place when the nuclein-saline solution is administered is shown by the author's detailed report of fifteen cases.

The nuclein-saline solution is given intra-

venously, under strict aseptic conditions. The dose of the nuclein solution used varied from 30 to 60 minims. This is diluted with a salt solution consisting of calcium chloride, 0.25; potassium chloride, 0.10; sodium chloride, 9.00; water, 1000. One ounce of the mixture is allowed for each twenty pounds of the patient's weight, eight ounces of the combined nuclein solution being an average dose for a person of ordinary weight. The solution is introduced into the median cephalic or median basilic vein, about twenty minutes being required for the completion of the transfusion.

In practically every case thus treated there has been a rapid increase in the percentage of hemoglobin, while the number of erythrocytes and the percentage of poikilocytes was diminished. In the majority of cases there has been a corresponding improvement in the patient's condition, shown by fall of temperature, slowing of the pulse and increase of weight. In forty-eight cases thus treated, practically all advanced, Ward has had but five deaths. Nine patients out of the fifteen cases reported in detail recovered, four were improved and two died. These results are certainly unusual.

Dr. Ward's deductions are as follows:

1. If there is not a net increase in the percentage of hemoglobin in two weeks' time, we do not expect any permanent result.
2. Even where there is no net increase in the hemoglobin, the treatment aids in keeping these people upon their feet.
3. With a constant increase in the percentage of hemoglobin, when the same has reached 85 to 100 per cent, and remains at this point for one month after all treatment has ceased, the patient may be declared well.

Officers of the American Medical Association, 1909-1910.

Next Annual Session, St. Louis, Mo., May, 1910.

President—William C. Gorgas, Ancon, Panama.

President-Elect—William H. Welch, Baltimore.

First Vice President—Robert Wilson, Charleston, S. C.

Second Vice President—Charles J. Kipp, Newark, N. J.

Third Vice President—Alexander Lambert, New York City.

Fourth Vice President—Stanley P. Black, Pasadena, Cal.

General Secretary—George H. Simmons, Chicago.

Treasurer—Frank Billings, Chicago.

Board of Trustees—W. W. Grant, Denver, Col., 1910; Philip Marvel, Atlantic City, N. J., 1910; Wisner R. Townsend, New York City, 1911; Philip Mills Jones, San Francisco, 1911; W. T. Sarles, Sparta, Wis., 1911; C. E. Cantrell, Greenville, Tex., 1910; M. L. Harris, Chicago, 1912; C. A. Daugherty, South Bend, Ind., 1912; W. T. Councilman, Boston, 1912.

Judicial Council—C. E. Cantrell, Greenville, Tex., chairman; J. H. Wilson, Dover, Del.; Harold Gifford, Omaha; C. S. Sheldon, Madison, Wis.; H. A. Christian, Cambridge, Mass.

Council on Medical Education—Arthur D. Bevan, Chicago, chairman, 1914; W. T. Councilman, Boston, 1910; James W. Holland, Philadelphia, 1912; Victor C. Vaughan, Ann Arbor, Mich., 1913; J. A. Witherspoon, Nashville, Tenn., 1911.

Council on Pharmacy and Chemistry—F. G. Novy, Ann Arbor, Mich., 1910; George H. Simmons, Chicago, chairman, 1910; H. W. Wiley, Washington, D. C., 1910; Otto Folin, Boston, Mass., 1911; Torald Soliman, Cleveland, 1911; M. I. Wilbert, Washington, D. C., 1911; Reid Hunt, Washington, D. C., 1912; J. H. Long, Chicago, Ill., 1912; Julius Stieglitz, Chicago, 1912; J. A. Capps, Chicago, 1913; David L. Edsall, Philadelphia, 1913; R. A. Hatcher, New York City, 1913; C. S. N. Hallberg, Chicago, 1914; L. F. Kebler, Washington, D. C., 1914; John Howland, New York City, 1914; W. A. Puckner, secretary, Chicago.

Committee on Medical Legislation—Charles A. L. Reed, Cincinnati, chairman, 1912; George W. Gay, Boston, 1911; C. S. Bacon, Chicago, 1910.

Officers of the Arkansas Medical Society, 1909-1910.

Next Annual Session, Little Rock, May, 1910.

President—James H. Lenow, Little Rock.

First Vice President—H. D. Wood, Fayetteville.

Second Vice President—E. L. Watson, Newport.

Third Vice President—F. A. Corn, Lonoke.

Treasurer—J. S. Wood, Hot Springs.

Secretary—Morgan Smith, Little Rock.

Delegate to American Medical Association—E. C. Hay, Hot Springs.

Alternate—B. Hatchett, Fort Smith.

OFFICERS OF SECTIONS.

Medicine—J. B. Grammar, Searcy, chairman; A. E. Cone, Portland, secretary.

Surgery—J. A. Lightfoot, Texarkana, chairman; E. E. Barlow, Dermott, secretary.

Obstetrics and Gynecology—J. R. Roe, Calico Rock, chairman; W. R. Rodman, Cushman, secretary.

Pathology—J. R. Dibrell, Little Rock, chairman; F. B. Kirby, Harrison, secretary.

State Medicine and Public Hygiene—C. H. Cargile, Bentonville, chairman; O. M. Bourland, Van Buren, secretary.

Diseases of Children—F. T. Isbell, Horatio, chairman; R. W. Lindsey, Little Rock, secretary.

Dermatology and Syphilology—G. A. Hebert, Hot Springs, chairman; J. H. Chestnutt, Hot Springs, secretary.

COUNCILOR DISTRICTS AND COUNCILORS.

1909-10.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, H. R. McCarroll, Walnut Ridge. Term of office expires 1911.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White counties. Councilor, H. O. Walker, Newport. Term of office expires 1910.

Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, S. A. Southall, Lonoke. Term of office expires 1911.

Fourth Councilor District—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, William Breathitt, Pine Bluff. Term of office expires 1910.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, H. H. Neihuss, Wesson. Term of office expires 1911.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, J. H. Weaver, Hope. Term of office expires 1910.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant counties. Councilor, J. C. Wallis, Arkadelphia. Term of office expires 1911.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope counties. Councilor, C. P. Meriwether, Little Rock. Term of office expires 1910.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren counties. Councilor, C. T. Cannady, Marshall. Term of office expires 1911.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington counties. Councilor, F. B. Young, Springdale. Term of office expires 1910.

COMMITTEES, 1909-1910.

Board of Visitors to the University of Arkansas, Medical Department, and the College of Physicians and Surgeons—O. M. Bourland, M. D., chairman, Van Buren; C. E. Hurley, M. D., Bentonville; R. B. Christian, M. D., Little Rock; R. H. T. Mann, M. D., Texarkana; William V. Laws, M. D., Hot Springs.

Committee on Scientific Work—Adam Guthrie, M. D., Prescott, chairman; Anderson Watkins, M. D., and Morgan Smith, M. D., Little Rock.

STATE BOARD OF MEDICAL EXAMINERS.

First District—M. Fink, Helena.

Second District—F. T. Murphy, secretary, Brinkley.

Third District—F. B. Young, Springdale.

Fourth District—M. L. Norwood, Lockesburg.

Fifth District—George S. Brown, President, Conway.

Sixth District—W. S. Stewart, Pine Bluff.

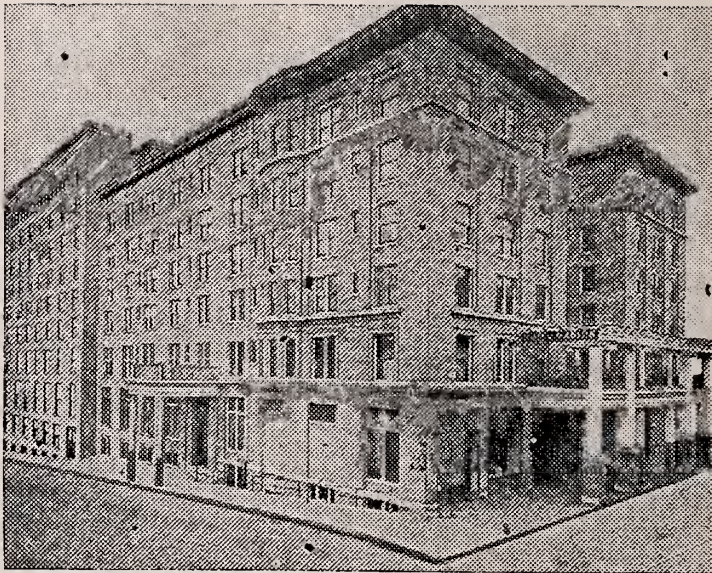
Seventh District—J. C. Wallis, Arkadelphia.

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HEADQUARTERS FOR ALL CONVENTIONS

In addition to the present hotel, there is an annex in course of construction situated north of the west wing of the present building, and will be connected on each floor. On the office floor will be situated the Convention Hall, with seating capacity of 1,000. In addition to above, there will be 135 more rooms, making a total of 325. This addition will be ready for occupancy January, 1910.

The Hotel Marion will be official headquarters for the Thirty-fourth Annual Session of the Arkansas Medical Society.

